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TWENTY-SIXTH
ANNUAL REPORT OF THE

BUREAU OF AMERICAN ETHNOLOGY

TO THE SECRETARY OF THE
SMITHSONIAN INSTITUTION

1904–1905

WASHINGTON
GOVERNMENT PRINTING OFFICE
1908

LETTER OF TRANSMITTAL

SMITHSONIAN INSTITUTION,
BUREAU OF AMERICAN ETHNOLOGY,
Washington, D. C., June 1, 1906.

SIR: I have the honor to submit herewith the Twenty-sixth Annual Report of the Bureau of American Ethnology.

The preliminary portion comprises an account of the operations of the Bureau during the fiscal year ending June 30, 1905, and this is followed by two memoirs, The Pima Indians, by Frank Russell, and Social Condition, Beliefs, and Linguistic Relationship of the Tlingit Indians, by John R. Swanton.

Permit me to express my appreciation of your aid in the work under my charge.

Very respectfully, yours,

W. H. HOLMES, *Chief.*

Mr RICHARD RATHBUN,
Acting Secretary of the Smithsonian Institution.

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REPORT OF THE CHIEF

TWENTY-SIXTH ANNUAL REPORT

OF THE

BUREAU OF AMERICAN ETHNOLOGY

W. H. HOLMES, CHIEF

INTRODUCTION

Ethnologic researches have been conducted by the Bureau of American Ethnology for the fiscal year ending June 30, 1905, in accordance with the act of Congress making provision "for continuing ethnological researches among the American Indians, under the direction of the Smithsonian Institution," approved April 28, 1904.

The work of the Bureau has been conducted in conformity with the plan of operations approved by the Secretary June 17, 1904. The systematic researches have been carried forward by the eight members of the Bureau's scientific staff, assisted by a large number of associates and collaborators who have been called on to prepare papers on special subjects or to conduct investigations for which their qualifications especially fitted them. During the year seven members and associates of the Bureau have made researches in the field, the regions visited including Maryland, Virginia, Oklahoma, Indian Territory, Arizona, New Mexico, Oregon, and Mexico.

The amount of field work has been somewhat curtailed by the necessity of detaining a number of the ethnologists in the office to assist in the completion of the Handbook of American Indians (hitherto referred to as the Cyclopedia or Dictionary of Indian Tribes), which was designed to be submitted to the Secretary at the close of the year. The enlarge-

ment of the scope of the work to include not only descriptions of the tribes and their settlements, but also popular articles covering the whole range of ethnological and archeological research relating to them, greatly increased the amount of investigation required, but the value of the Handbook as a work of reference has been more than proportionately increased. With the view of revising and unifying the great number of articles designed for introduction into the Handbook a committee of revision was organized, consisting of members of the Bureau and all available resident anthropologists, fourteen in all, who met three times each week to discuss the papers presented. The meetings of this committee proved both interesting and profitable, and suggested the advisability of holding similar meetings hereafter for the discussion of current researches of the Bureau.

As a result of the preparation of the papers for the Handbook, covering, as they do, the entire range of Indian ethnology, the researches conducted in the office during the year have been exceptionally comprehensive; every branch of anthropology, including somatology, psychology, linguistics, sociology, religion, technology, and esthetics, has received such consideration as the comprehensive though necessarily brief articles for the Handbook required. Besides the articles treating of these primary departments of research, many others have been prepared, on the various phases of the history, archeology, biography, and education of the Indians and the administration of their affairs. With the exception of the bibliography and index, which were retained for reference in proof reading, the manuscript for the Handbook, accompanied with about 800 illustrations, was submitted to the Secretary July 1.

Under the auspices of the Smithsonian Institution the Chief visited Europe for the purpose of attending the International Congress of Americanists, held at Stuttgart, Germany, beginning August 18, 1904. In addition to representing the Smithsonian Institution, he served as delegate of two other scientific organizations, and was also designated by the Department of State as the official representative at

the congress of the United States Government. As a member of the scientific staff of the National Museum he was intrusted with the additional commission of visiting a number of the principal museums of Europe for the purpose of acquiring information to be utilized in the erection and furnishing of the new National Museum building. On July 26 the Chief sailed from New York in company with Mr J. R. Marshall, of the firm of Hornblower & Marshall, architects of the new building, and reached Plymouth, England, August 1. Nine days were spent in visiting the museums of London, Oxford, and Cambridge, and eight days in similar observations in Paris, and on August 18 Stuttgart was reached. The opening session of the Congress of Americanists was held in the forenoon of that day and was attended by a large number of members and other prominent persons, including His Majesty King William II of Wurttemberg, who, in response to the address of the president of the congress, Prof. Karl von den Steinen, expressed at length his appreciation of the aims and work of the congress, and his pleasure at having the session held in his capital city.

A report of the last meeting of the congress, held at New York City in 1902, was presented by Dr Franz Boas, honorary philologist of the Bureau, and other routine business was transacted. Members of the congress were invited to take luncheon with the King at his suburban palace, which was followed by a reception in the palace gardens. The King's interest was highly appreciated and contributed much to the success of the occasion. During the presence of the Americanists receptions were held also by Count von Linden, vice-president of the congress, and by Mr Edward N. Ozmun, United States consul at Stuttgart. Sessions were held on August 19, 20, 22, 23, and 24, and a large number of papers, dealing in the main with questions of American history, ethnology, and archeology, were read. On the 20th the Chief of the Bureau of American Ethnology delivered an address on "Contributions of American Archeology to Human History," and at its close he presented to the congress a set of 75 bound volumes, relating chiefly to American archeology and ethnology, published by the Smithsonian

Institution and two of its bureaus—the National Museum and the Bureau of American Ethnology—for which the president extended the thanks of the congress. The Chief presented also a series of 66 photographs of American Indians, representing delegations which visited Washington during the winter of 1903–4, the series having been taken conjointly by the Bureau of American Ethnology and the National Museum. Various excursions were made to points of interest, the principal being to Schaffhausen, Switzerland, to visit the sites of Dr J. Nuesch's recent explorations of the famous lake-dwelling stations at Schweizerbild and Koenigsbau.

After the adjournment of the congress the Chief proceeded to Dresden, where, under the guidance of Dr A. B. Meyer, director of the Royal Zoological and Anthropological Museum of Saxony, the various museums of that city were examined. After leaving Dresden, a number of cities in Germany, Holland, and Belgium were visited with a view to museum study, and on September 12 he returned to Paris, and on the 25th sailed from Cherbourg, en route for New York. Between the date of his arrival in Plymouth, August 1, and his departure from Paris, September 25, the Chief of the Bureau visited and made studies of about 50 museums. The observations made are embodied in a separate report submitted to the Secretary of the Smithsonian Institution.

RESEARCH WORK

Shortly after his return from Europe, in September, the Chief found it necessary to undertake the preparation of a number of articles relating to aboriginal art and archeology for the Handbook of American Indians. Among the subjects treated at some length are antiquity, archeology, architecture, art, bonework, Bureau of American Ethnology, catlinite, cliff-dwellings, copper, engraving, graphic art, mines and quarries, metal work, ornament, pottery, sculpture, shell heaps, shellwork, and stonework. The only field work undertaken by the Chief during the year was a brief visit to Cavetown, Md., for the purpose of observing the exploration

there being conducted by Dr Charles Peabody and Mr W. K. Moorehead in the well-known cave near that village. Mr J. D. McGuire had begun the exploration of this cave for the Carnegie Institution in 1903 and had obtained valuable evidence of its former occupancy by Indians. The present work, which consisted of extensive excavations within the outer chamber of the cavern, yielded much additional material of the same general character.

During the first few weeks of the year Mr James Mooney, ethnologist, was in St Louis supervising the final installation of the Kiowa heraldry exhibit in the Smithsonian section of the Government building, Louisiana Purchase Exposition. This exhibit comprised about 120 articles, filling 50 linear feet of wall case, together with one floor case, and consisted of 90 small shield models, 4 original shields, 5 tipi models, 6 paintings on buckskin, with several ceremonial lances and smaller objects. On the completion of this work, after a brief leave of absence, Mr Mooney returned to Mount Scott, in the Kiowa country, Oklahoma, where he continued his researches, including the preparation of models and the collection of ethnological material. A number of Cheyenne tipi models were also made for the Field Columbian Museum, of Chicago, with funds provided by that institution, as authorized by joint arrangement with the Bureau. At the end of October Mr Mooney returned to Washington and was engaged in writing a preliminary paper on Kiowa heraldry until about the end of the calendar year, when he was called on to cooperate in the preparation of the Handbook of American Indians, for which work the following articles were furnished: Arawakan colony, Calusa tribe, Cheyenne tribe, Kiowa tribe, military societies, peyote, population, shields, signals, sign language, skin-dressing, and Timucua tribe. Besides these about 100 minor articles were prepared, treating of tribes, biographies of noted Indians, and other subjects. In connection with this work the available information relating to the ancient tribes of Florida and the Gulf states generally was found to be so deficient and confused that Mr Mooney undertook an investigation of the subject from original sources.

A portion of the results has been embodied in the Handbook of American Indians, and the foundation has been laid for an extended paper on the ethnology of this region, to form a complement to his previous studies of the Siouan tribes of the East and the Cherokee. In the meantime he also supervised the photographing of the large series of shield models and other portions of the heraldry collection made by him during previous years, and prepared catalogues and labels for such portions of this material as were required for the Bureau exhibit at the Lewis and Clark Exposition held at Portland, Oreg.

Dr J. Walter Fewkes, ethnologist, spent the first six months of the year in the completion of the text of his monograph on the Aborigines of Porto Rico. He left Washington on January 7, 1905, for an extended archeological trip to the Republic of Mexico, under a grant from the Smithsonian Institution, and returned on the 15th of May. About three weeks were spent by Doctor Fewkes in the City of Mexico making arrangements with Government officials for letters to those who could aid him in the prosecution of his studies. While not thus engaged at the capital his time was profitably employed in studying the collections in the Museo Nacional and one or two private collections and in making several excursions to places of archeological interest in the neighborhood of the city, including several of the ruins near Lake Tezcoco, as well as those at Iztapalapa and at San Juan Teotihuacan. While awaiting letters of introduction from the President to the governors of Veracruz and Tamaulipas, Doctor Fewkes visited Cuernavaca, where he photographed the so-called "Victory stone," the pictograph of the eagle, and the famous stone lizard, and made a trip also to the ruins of Xochicalco and Tepoztlan. From the ruin known as Casa del Tepozteco he obtained copies of inscriptions on the raised seat in the inner room.

After receiving the necessary letters through the courtesy of President Diaz, Doctor Fewkes proceeded to Xalapa, in the State of Veracruz, which he made the base of operations during February, March, and a part of April. While in the city of Veracruz, considerable time was devoted to an

examination of the fine collection of Governor Dehesa, as well as to the collection of Señora Estafania and others. The vicinity of Xalapa was found to be particularly rich in ruins and mounds, among which are those at Coatepec, Bandarilla, and Xalapa Viejo. An excursion was made also to Texolo, where there are thirteen or more large mounds, some of which are evidently the remains of temples of an old Totonac city. Xico Viejo, an undescribed ruin of a Nahuatl garrison town mentioned by Bernal Diaz and Gómara, was also visited in the mountains near the trail taken by Cortés from the coast to the City of Mexico in 1519. Instructive photographs of this ruin were taken, and notes made on the idols and pottery found in the neighborhood.

Doctor Fewkes made two visits to the ruins of Cempoalan, about 20 miles from the city of Veracruz. On the first visit he was accompanied by an official representative of Governor Dehesa, by the alcalde of San Carlos, a neighboring town, and by the inspector and owner of the ruins. On the second trip, when he spent a week at the ruins, Governor Dehesa kindly permitted him to employ the services of the State photographer, Señor Ximenes.

At the close of March Doctor Fewkes visited the old city of Villa Rica de la Veracruz, now called Antigua, founded by Cortés. In the neighborhood of this city, but on the opposite side of the river, he found many mounds indicating the site of a large prehistoric city. Other ruins were observed at Santa Fé.

Doctor Fewkes examined some of the antiquities about Cordova and Orizaba; he also visited the pyramid of Cholula, near Puebla, and near the middle of April proceeded to the state of Tamaulipas, spending about three weeks at Tampico in a study of the numerous ruins along the Panuco and Tamesi rivers and on the adjacent lagoons, and in visiting the extensive shell heaps and temple mounds a mile east of Tampico and others not far from the site of the old town, Tampico Viejo. Doctor Fewkes found numerous antiquities at Altamira and mounds on the banks of the Champayan lagoon. Many other evidences of former occupancy, as idols, pottery, stone weapons, and ornaments, were seen in

this region. The old city of Chila, destroyed by Cortés, situated about 10 miles west of Tampico, was found to be hidden in a forest. Evidences of temples and burial mounds also occur abundantly in this locality. About 50 photographs of bowls, jars, and idols found in the neighborhood of Panuco, Tampico, and the lagoons along the banks of the Tamesi river, were made. Of more than usual interest are those of large stone idols at Altamira and in the courtyard of a house in Tampico.

On his return to Washington, Doctor Fewkes continued the study from his notes and photographs and prepared a general account of his visit to Cempoalan and Xicochimalco, which was transmitted for publication by the Smithsonian Institution. The illustrative material brought back includes about 200 large photographic negatives, numerous smaller views, tracings of pictographs, and many drawings, plans, and maps.

Dr Cyrus Thomas, ethnologist, was engaged during the year largely on the Handbook of American Indians, assisting Mr Hodge in the laborious task of preparing the manuscripts for publication. Among the articles written by Doctor Thomas during the year for this work are agriculture, calendar, counting, Five Civilized Tribes, fortifications, habitations, maize, migrations, mortuary customs, mounds and mound builders, population, reservations, and treaties, besides a number of biographical sketches and certain archeological articles of a more special character. The work of reading the proofs of Bulletin 28, which required especial acquaintance with the archeology and glyphic systems of the ancient Mexicans, was also intrusted to Doctor Thomas, and was completed before the end of the year. He was also frequently called on for data required in official correspondence relating to his special branches of research.

Mr J. N. B. Hewitt, ethnologist, at the beginning of the year began the preparation of various articles for the Handbook of American Indians, and continued the correction and elaboration of the material pertaining to the Iroquoian stock for the same work. Among the articles in hand are those

on adoption, chiefs, clans and gentes, confederations, government, mythology, scalping, wampum, and women. The work of cataloguing the collection of linguistic manuscripts, of which Mr Hewitt is custodian, was completed as far as copying the old cards in duplicate, when the work was laid aside for that of the Handbook. He also gave material assistance in furnishing data required in the correspondence of the Bureau relating to tribes and languages.

Mrs M. C. Stevenson, ethnologist, spent the month of July in New Mexico, where she had been for some months making a study of the arts, industries, religion, and social customs of the Zuñi tribe. It was observed that the Zuñi pantheon is largely similar to that of the Hopi and the Rio Grande pueblos. Although the Zuñi worship numerous deities which take both human and bestial form, they believe also in a supreme power without form, yet embracing all form, the breath of life—life itself. These beliefs indicate that the Zuñi have reached a higher stage of culture than has previously been supposed, although it can not yet be said to what extent this may be attributed to the Spanish influence to which the tribe was more or less subjected for three centuries. Various details relating to Zuñi life were investigated, and valuable information regarding mortuary customs was obtained through the death and burial of Naiuchi, a celebrated priest-chief, whose demise occurred during Mrs Stevenson's stay in Zuñi pueblo. Native plants entering into the medicine and dietary of the Zuñi were also studied; the arts of preparing and dyeing wool, which have not been practised for many years, were observed, and specimens of the native materials and devices employed in the process, as well as of the dyed wool, were collected. Studies of symbolism as embodied in Zuñi textile and ceramic art, and investigations into the everyday life, and especially the child life, of the pueblo were likewise made.

Early in August a day was spent by Mrs Stevenson with the Santa Clara Indians in making a series of photographs of their annual fiesta. The month was occupied principally, however, in a study of the Sia Indians, a few days being given

to the neighboring Jemez pueblo. On the 27th Mrs Stevenson reached Cochiti, whence a visit was made to the great stone carving of cougars on the mesa 10 miles distant. In Mrs Stevenson's comparative studies these sculptures are of special interest, as they are referred to in some of the most sacred myths of the Zuñi. The first part of September was employed in a visit to the cavate and mesa ruins about 12 miles from Santa Clara and in making observations among the Tewa people of San Ildefonso, Santa Clara, and San Juan pueblos. The religious beliefs, rituals, and daily customs of these people were found to be closely allied to those of the Zuñi, difference in language alone indicating that distinct peoples are involved. In October Mrs Stevenson returned to Washington, where she has since been engaged in the revision of proofs of her memoir on the Zuñi Indians, in the Twenty-third Annual Report, and, as opportunity afforded, in the elaboration of her several studies on Zuñi religious beliefs, on the edible and medicinal plants of the Zuñi, on symbolism as embodied in the textile and ceramic arts, and on the dyeing of textile fabrics.

Dr J. R. Swanton, ethnologist, was engaged during the year in copying and preparing for the press material obtained by him among the Tlingit Indians of Alaska during the winter of 1903–4. This work, as completed, consists of 137 pages treating of the general ethnology of the Tlingit peoples, 20 native texts with interlinear and free translations, the words of about 100 songs, with translations, together with English versions of 88 stories obtained at Sitka and Wrangell—altogether making 900 typewritten pages. Doctor Swanton has prepared also grammatical accounts of the Dakota, Haida, and Tlingit languages for introduction into the Handbook of American Indian Languages now in course of preparation under the direction of Dr Franz Boas, honorary philologist of the Bureau; and he has also been called on to contribute several articles for the Handbook of American Indians, including kinship, names and naming, priests and priesthood, secret societies, social organizations, thunderbird, totem poles, and numerous tribal articles.

Dr A. S. Gatschet, ethnologist, continued his work on certain unfinished linguistic studies which it was hoped could be completed for publication before his failing health made further progress impossible, but in January he was compelled practically to relinquish his efforts, and on March 13 was placed on furlough.

Early in the year arrangements were made with the United States National Museum to have Dr Aleš Hrdlička, curator of physical anthropology in the Museum, visit Arizona and New Mexico in behalf of the Bureau for the purpose of making physical, physiological, and medical observations among the Apache and the Pima Indians. Leaving Washington on January 20, Doctor Hrdlička began his studies five days later on the San Carlos Apache reservation, where he remained until February 8, when he visited a group of Apache residing near what is known as the Sawmill, in the Black River region. From this point he returned to San Carlos, and on February 13 reached the Rice Station Apache school and district, situated farther northeast on the reservation. On February 26 Doctor Hrdlička endeavored to reach the White Mountain branch of the Apache, but was prevented from doing so by exceptionally heavy rains. On March 1 he was able to proceed to Sacaton, Ariz., where studies of the Pima tribe were made. From March 12 to 16 he was at Casa Blanca. On the latter date he returned to Casa Grande, and thence proceeded to El Paso, Tex., reaching the reservation of the Mescalero Apache in New Mexico on the 19th. After remaining six days with the Mescaleros, Doctor Hrdlička began his return journey, reaching Washington March 31.

Doctor Hrdlička's researches were conducted with the object of supplementing his former investigations among the same tribes. As much attention as possible was devoted to the children, from birth onward, the number examined being nearly 1,000. Other important subjects to which study was especially devoted were fecundity, mortality, native foods, hygiene, disease, and curative means and methods. These studies were greatly facilitated by the

officials of the Indian Office, and met with little objection on the part of the Indians.

In addition to his direct anthropologic investigations, Doctor Hrdlička succeeded in gathering specimens of about 150 medicinal and food plants and a number of ethnological objects. He procured one Apache skull and five complete Apache skeletons, and in addition to making observations of value among the ancient ruins of the general region, obtained many archeological specimens from hitherto unexplored ruins in the San Carlos valley.

In April Mr E. L. Hewett, who was engaged during the winter months in preparing for the Bureau an archeological map of Colorado and New Mexico, was commissioned to proceed to New Mexico for the purpose of making extended researches among the ancient ruins of the so-called Pajarito Plateau district. His first work was the investigation of numerous deserted and ruined pueblos of the Tewa tribes. This was followed by excavations of ancient mounds in Otowi canyon, which yielded results of exceptional interest. Upward of 175 burials were uncovered, and the osseous remains of more than 100 individuals were collected and forwarded for study in the National Museum. The art remains comprise numerous entire earthenware vessels and many fragments, with a fair complement of implements of bone and stone. Mr Hewett was fortunate in reaching this arid spot in an exceptionally wet season, as he found water always within easy reach. At the close of the year he had completed his studies within the boundaries of Pajarito plateau and was preparing to explore the plateaus and mountains to the west and the Jemez valley beyond.

In June a report reaching the Bureau that important finds of prehistoric remains of man and art had been made on the site of the forthcoming Jamestown Exposition, near Norfolk, Va., Mr J. D. McGuire was commissioned to visit the locality and report on the character of the discoveries made. Mr McGuire spent one day on the exposition grounds collecting such information as was available, and later reported that although traces of human remains had been exposed in the

excavations of the exposition company, the reports had been greatly exaggerated, the discoveries being meager and uniform in character with the relics of countless other sites in the Chesapeake-Potomac region.

HANDBOOK OF AMERICAN INDIAN LANGUAGES

The work of Dr Franz Boas, honorary philologist, was confined to the preparation of the Handbook of American Indian Languages, which has been under way for several years. The main part of the field work for the first part of the Handbook was closed during the present year and some field work designed to be embodied in the second part was taken up. Doctor Boas also furnished the article on languages for the Handbook of American Indians.

In the course of the fiscal year the following manuscripts for the Handbook of American Indian Languages have been submitted:

1. Dr P. E. Goddard: Grammatical notes on the Hupa (Athapascan stock).
2. Dr A. L. Kroeber: Grammatical notes on the Yuki (Yukian stock).
3. Dr Roland B. Dixon: Grammatical notes on the Maidu (Pujunan stock).
4. Dr William Jones: Grammatical notes on the Sauk and Fox (Algonquian stock).
5. Dr John R. Swanton: Grammatical notes on the Dakota (Siouan stock).
6. Dr John R. Swanton: Grammatical notes on the Haida (Skittagetan stock).
7. Dr John R. Swanton: Grammatical notes on the Tlingit (Koluschan stock).
8. Dr Franz Boas: Grammatical notes on the Kwakiutl (Wakashan stock).
9. Dr Franz Boas: Grammatical notes on the Chinook (Chinookan stock).

The following manuscripts are still outstanding:

1. Mr J. N. B. Hewitt: Grammatical notes on the Iroquois (Iroquoian stock).

2. Dr Franz Boas: Grammatical notes on the Eskimo (Eskimauan stock).

3. Dr Franz Boas: Grammatical notes on the Tsimshian (Chimmesyan stock).

During the year the grammatical notes on the Shoshoni, by Mr H. H. St Clair, 2d, have been revised.

The general plan of the Handbook of American Indian Languages has undergone no material change, except in so far as it was deemed advisable to add briefer articles on the grammar of others of the remaining languages of the northern part of the continent. These are the Tlingit, the Salish, the Kutenai, and the Chimakum. It is deemed advisable to add also a sketch of one of the coast languages of Oregon which was collected during the year 1904–5 by Mr St Clair, who submitted his material on the Coosa and Takelma of Oregon during the present year.

It was considered desirable to add also certain data relating to the formation of the noun in Chinook, which seemed of importance, in order to elucidate some questions relating to the fundamental traits of that family of languages. Since all our information on this stock is derived from one informant, it was deemed essential to obtain additional material from other sources and from another dialect. For this reason preparations were made to send Mr E. Sapir to the upper Columbia river to make a study of the Wasco. In the preparation of this work the Kathlamet dictionary, based on Bulletin 26, was arranged and copied.

The work on the Southern group of languages will require long and energetic field work. So far only one of the languages of the Gulf states, the Yuchi, has been taken up, this tribe being selected because it seems most likely to furnish material that will be not only of linguistic value, but will afford knowledge of the early history and customs of the Southeast. This work has been intrusted to Mr Frank G. Speck, who spent the summer of 1904 among the Yuchi tribe and who returned to this field at the close of the fiscal year.

HANDBOOK OF AMERICAN INDIANS

Work on the Handbook, hitherto frequently referred to as the "Dictionary of Indian Tribes," has been vigorously prosecuted during the year under the immediate supervision of Mr F. W. Hodge, of the Smithsonian Institution, who, with the approval of the Secretary, has devoted most of his time thereto. Mr Hodge has had the almost undivided assistance of Dr Cyrus Thomas, and, as occasion required, nearly the entire scientific staff of the Bureau has aided both in the preparation of the anthropologic and kindred articles and in the revision and elaboration of the tribal descriptions found to be necessary by reason of recently acquired knowledge. So far as the funds of the Bureau afforded, the aid of ethnologists not officially connected with the Bureau was also enlisted. The services generously rendered by these, either gratuitously or for a merely nominal consideration, are highly appreciated.

As outlined in former reports, it was originally the plan of Major Powell to classify the linguistic families, tribes, and settlements north of Mexico and to identify the various names by which these had been known in the vast literature of the subject, with a brief description of each such group. This material, recorded on many thousands of cards, became known as the "Cyclopedia of Tribes, with Synonymy."

In 1903 the Secretary altered the scope of the work by directing the incorporation of brief separate articles pertaining to the habits, customs, arts, and industries of the Indians and of their dealings with the Government, together with biographies of noted individuals and a list of words of northern Indian origin that have been incorporated into the English language. No work so comprehensive in its scope had hitherto been attempted, consequently in making plans for the new departure it became necessary to begin at the foundation. The popular style of treatment was ever kept in mind, and considerable time was consumed in correspondence with experts best qualified for the preparation of many of the special articles called for by the enlarged plan. For these reasons it has not been possible to complete the work

at an earlier date. Owing to the fact that many of the specialists do not reside in Washington, it was difficult, within a limited time, to arrange for entire consistency in treatment and to prevent repetition through encroachment of one subject on another when written by many hands. On this account, and for the purpose of obtaining the views and criticisms of as many experts as possible, conferences were held, as already mentioned, three times each week, which were faithfully attended by the ethnologic staffs of the Bureau and the National Museum, as well as by other resident ethnologists; and ethnologists from elsewhere, while visiting Washington, often gave this committee of revision the benefit of their criticism.

As the articles prepared both by the regular attendants and by others were read at the conferences, and thus were accorded opportunity for criticism, the value of the meetings in promoting the authoritativeness of the forthcoming Handbook is inestimable. New subjects were constantly suggested, and in some instances much new light was shed on others, after having been written, by reason of the personal knowledge of one or another of the critics present.

In addition to the special articles elsewhere mentioned in this report as prepared by members of the Bureau, the following are among the more important of those that have been furnished by specialists not officially connected with it:

By Dr A. F. Chamberlain: Armor, Basque influence, Chinook jargon, Dutch influence, Eliot's Bible, English influence, fur trade, German influence, Hawaiian influence, Kutenai, linguistic families, "Lost Ten Tribes," maple sugar, Melungeons, Negro and Indian, race names, Scandinavian influence, Spanish influence, wild rice, and many articles pertaining to words of Indian origin incorporated into the English language.

By Mr Stewart Culin: Games.

By Dr William H. Dall: Russian influence.

By Miss Anna Dawes: Commission to the Five Civilized Tribes.

By Dr G. A. Dorsey: Ceremony, Sun dance.

By Mr Wilberforce Eames: Bible translations, dictionaries, periodicals.

By Dr Livingston Farrand: Marriage, and many articles descriptive of some of the linguistic families and tribes of the Northwest.

By Miss Alice C. Fletcher: Adornment, agency system, buffalo, camping and camp circles, civilization, dramatic representation, dreams and visions, earth lodge, etiquette, fasting, feasts, furniture, governmental policy, grass lodge, land tenure, masks, music and musical instruments, oratory, orientation, poetry, property and property rights, quillwork, soldiers, tattooing, totems, trading posts, war and war discipline, and articles descriptive of the Caddoan tribes.

By Mr Gerard Fowke: "Lansing man," and many articles on technological subjects.

By Dr George Bird Grinnell: Horses.

By Mr H. W. Henshaw: Atlantis, exchange, pictography, popular fallacies, slavery, and sweating and sweat houses.

By Mr F. W. Hodge: Adobe, Casa Grande, irrigation, kiva, and many tribal articles, especially those pertaining to the Southwestern Indians.

By Dr Walter Hough: Altar, clothing, collecting and excavating, dyes and pigments, fire making, food, illumination, preservation of specimens, and Snake dance, in addition to a large number of brief articles on various implements, utensils, materials used in manufacturing processes, etc.

By Dr Aleš Hrdlička: Anatomy, artificial head deformation, cannibalism, health and disease, mixed bloods, and physiology.

By Mr J. D. McGuire: Drilling, fishing, pipes, smoking, storage and caches, tobacco, and trails and trade routes.

By Dr Otis T. Mason: Arrows, bows, and quivers; arts and industries, basketry, beadwork, boats, commerce, domestication of animals, education, environment, featherwork, hunting implements, invention, needlework, traps, travel and transportation, weapons, and weaving.

By Dr Washington Matthews: Color symbolism, dry painting, ethics, family, magic, measurements, medicine, and mourning.

The Bureau was also fortunate enough to have the services of Dr A. L. Kroeber, of the University of California, who generously revised the accumulated material pertaining to many of the linguistic families of California, and in addition gave much valuable information respecting the Shoshonean and Yuman families and the Mission Indians. The remaining Californian stocks were reviewed or revised by Dr P. E. Goddard and Mr S. E. Barrett, also of the University of California, and by Dr Roland B. Dixon, of Harvard University.

With the exception of a few articles that had not been quite finished by those to whom the subjects were assigned, the manuscript of the body of the Handbook, recorded on more than 40,000 cards, together with about 800 illustrations, was submitted to the Secretary for transmittal to the Public Printer on July 1, 1905, for publication in two octavo volumes as Bulletin 30 of the Bureau. These cards do not include about 37,000 cross-references to the tribal synonyms, nor the bibliography, which are retained for use in reading the proofs of the text. After serving this purpose they will be ready to be put in type to appear at the close of the work.

ARCHEOLOGICAL MAP

The work of compiling an archeological map of the United States, which had received some attention in previous years, was carried forward with all possible dispatch during the last year. The departments of the Government having control of the public lands have undertaken to protect the archeological remains of these lands from despoliation by commercial relic hunters and unskilled and unauthorized explorers, and excellent progress in this direction has been made, especially by the Department of the Interior. For years the Bureau has been collecting data relating to these remains, and whenever called on has furnished all available information for the use of the departments in carrying out this laudable enterprise. During the winter months Mr J. D. McGuire was engaged in collecting and collating data relating to the antiquities of Arizona and Utah, and in platting these on topographical maps furnished by the United States Geo-

logical Survey; and Mr E. L. Hewett has carried forward practically to completion a corresponding work in Colorado and New Mexico. The several maps have been completed so far as the data are at hand. Accompanying the maps is a card catalogue of the various sites, giving information regarding location, character of remains, and explorations previously carried on. These maps and catalogues are at the disposal of the departments when called for.

In New Mexico the following sheets embrace 512 sites of sufficient interest to be catalogued: Santa Fé, Santa Clara, San Pedro, Pajarito park, Bernal, Las Vegas, Chaco canyon, Mount Taylor, Largo, Lamy, Wingate, Jemez, Taos, Tierra Amarilla, Quemado, Acoma, Manzano, Pinos Wells, Tularosa, Chloride, San Marcial, Fort Stanton, Big Hatchet, Chama, El Paso, Fort Bayard, Las Cruces, San Juan, Albuquerque, and Tres Hermanos. In Colorado the Mesa Verde sheet alone includes 54 sites. On the 21 Arizona sheets (Tusayan, Fort Defiance, San Francisco mountain, Echo cliff, St Johns, Prescott, Verde, Florence, Holbrook, Canyon de Chelly, Solomonsville, Globe, Phoenix, Casa Grande, Fort Apache, Diamond creek, Chino, Marsh pass, Tombstone, and Tucson) 270 sites are recorded, and on the Utah sheets (Ashley, Beaver, Escalante, Fish lake, Henry mountain, Kanab, Manti, Salt lake, San Rafael, St George, Price river, Uinta, La Salle, Abajo, and Utah) are noted 122 sites. The 1,008 archeological sites thus catalogued are scattered over an immense territory and come under the jurisdiction of the Interior, Agricultural, and War Departments.

EXPOSITION WORK

The exhibit of the Bureau installed in the Smithsonian section of the Government building of the Louisiana Purchase Exposition at St Louis during 1904, and described in the report for that year, was dismantled at the close of the exposition and a large part of it transferred to Portland, Oreg., where it has been installed as a part of the Institution's exhibit at the Lewis and Clark Exposition. The remainder of the material has been returned to Washington and deposited in the National Museum.

STUDY OF INDIAN DELEGATIONS

The systematic study of visiting Indian delegations has been continued with success. During the year 23 delegations, representing 21 tribes, have been conducted, through the agency of Mr Andrew John, to the Bureau and the National Museum laboratories. About 280 portrait negatives have been made, and casts and measurements of a number of individuals have been obtained. Few Indians of the higher type, however, are willing to submit to the experience of having the face encased in plaster. The tribes represented are as follows:

Tribe.	Photo.	Cast.	Measurement.	Tribe.	Photo.	Cast.	Measurement.
Apache	3	.....	.....	Oneida	1	.....	.....
Catawba	1	1	1	Onondaga	1	.....	.....
Cherokee	1	.....	.....	Osage	5	1	2
Choctaw	1	.....	.....	Pawnee	4	.....	4
Cayuga	5	.....	.....	Pueblos	11	.....	11
Colvilles	3	.....	.....	Seneca	3	2	1
Creeks	3	.....	3	Stockbridges	1	.....	1
Flatheads	2	.....	.....	Sioux	11	.....	11
Menominee	4	1	2	Wyandot	2	.....	.....
Mission Indians	1	.....	.....				
Modoc	4	.....	.....	Total	68	6	37
Omaha	1	1	1				

COLLECTIONS

The ethnological collections obtained during the year fall considerably short of those of previous years, owing to the reduced amount of field work undertaken. This condition was due, as already explained, to the necessity of keeping most of the scientific staff in Washington to aid in the completion of the Handbook of American Indians. The accessions are a valuable collection made by Mrs M. C. Stevenson at Zuñi, a series of archeological objects obtained by Doctor Hrdlička in Arizona and New Mexico, and several minor collections, all of which have been deposited in the National Museum.

PUBLICATIONS

The distribution of publications has continued as in former years. The great increase in the number of libraries in the country and the multiplication of demands from the public generally have resulted in an almost immediate exhaustion of the quota of volumes allotted to the Bureau, few copies of any of the reports remaining six months after the date of issue. Part II of the Twenty-second Annual Report was issued in January. During the year 1,591 copies of the Twenty-first and Twenty-second Annual Reports were sent to regular recipients, and 2,000 volumes and pamphlets were transmitted in response to special requests, presented largely by Members of Congress. The proof reading of the Twenty-third Annual Report and of Bulletin 28 was practically completed at the close of the year, and it is expected that the presswork of these publications will soon be begun. The Twenty-fourth Annual Report was in the hands of the printer before the close of the year, and Bulletins 29 and 30, the latter being the Handbook of American Indians, were ready to be submitted to the Secretary on June 30, 1905, while the manuscript of the Twenty-fifth Annual Report was completed, with the exception of a small number of illustrations.

EDITORIAL WORK

The editorial work of the year has presented features of exceptional difficulty, on account of the large number of papers dealing with linguistics and technical subjects. The Bureau has had the services of Mr Frank Huntington for the greater part of the year, and Mr J. P. Sanborn, jr, received a probational appointment as editor in May. The reading of the proofs of Mrs Stevenson's monograph on the Zuñi Indians for the Twenty-third Annual Report, a work of much technical difficulty, was intrusted mainly to Mr E. G. Farrell.

ILLUSTRATIONS

The work of preparing illustrations has continued in charge of Mr De Lancy Gill, who has been assisted, as heretofore, by Mr Henry Walther. The photographic work has included the making of portraits of members of 21 Indian delegations which visited the capital during the year. Three views of each individual were taken, besides several group views, the negatives numbering 298. In preparing illustrations for the publications of the Bureau upward of 200 negatives were made, and 156 films exposed in the field by members of the Bureau were developed in the laboratory. During the year about 2,350 prints were made, mainly for immediate use in illustrating the Bureau publications. Illustrations prepared for the Twenty-fourth Annual Report number 45; for the Twenty-fifth Annual Report, 128; for Bulletin 30, 800. Illustrations transmitted with reports submitted to the Secretary for publication are: For the Twenty-fourth Annual Report, 1,103; for Bulletin 30, 871. Illustrations edited for the Twenty-third Annual Report number 25; for the Twenty-fourth Annual Report, 1,102. The printed editions of 48 colored plates submitted by the engravers for the Twenty-third and Twenty-fourth Annual Reports, numbering about 450,000 prints, were individually examined and approved or rejected.

LIBRARY

The library has been in immediate charge of Miss Ella Leary, who has had the assistance of Mrs Ella Slaughter. The accessioning and cataloguing of the books, pamphlets, and periodicals received during the year have been kept up to date, and the cataloguing of the publications of scientific societies has been commenced. Owing to the crowded condition of the library and their questionable place in an ethnological library, about 400 publications relating to natural history, received through exchange, have been transferred to the National Museum. During the year there have been received and recorded 398 volumes, 500 pamphlets, and the

current issues of upward of 500 periodicals; 120 volumes have been bound at the Government Printing Office. The library now contains about 12,563 bound volumes, 7,000 pamphlets, and a large number of periodicals bearing on ethnology and kindred topics. Purchase of books for the library has been restricted to those that bear on the subject of anthropology, with special reference to the American Indians, and only indispensable works have been obtained by this means.

CLERICAL WORK

The clerical force of the Bureau consists of four regular employees—Mr J. B. Clayton, head clerk; Miss Emilie R. Smedes and Miss May S. Clark, stenographers; and Miss Ella Leary, clerk and acting librarian. During the year the compilation of the Handbook of American Indians necessitated the employment of additional clerks with special training in dealing with cyclopedic material and in bibliographic work. In this the services of Mrs F. S. Nichols, Mrs Gertrude L. Rogers, and Miss Laura W. Steever have proved invaluable.

PROPERTY

The property of the Bureau is comprised in seven classes, as follows: Office furniture and appliances; field outfits; linguistic and ethnological manuscripts and other documents; photographs, drawings, paintings, and engravings; a working library; collections held temporarily by collaborators for use in research; and undistributed residue of the editions of Bureau publications.

The additions to the property of the Bureau for the year include a typewriter and a few necessary articles of furniture. The only improvement made in the offices was the changing of the electric-light wiring, which was done under the direction of the District authorities, at a cost of $116.55.

ACCOMPANYING PAPERS

THE PIMA INDIANS

BY

FRANK RUSSELL

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PIMA SOUNDS AND THEIR SYMBOLS

a .....as in father.
â .....as in law.
ä .....as in what.
ä .....as in hat.
ɐ .....indeterminate sound between a and ä.
c .....as sh in shall, a rare sound: occurs in vi-shûk (hawk).
d .....as in dread.
e .....as in they.
ĕ .....as in then.
f .....as in fife.
ɟ .....as a mere breathing.
g.....as in good; occurs in foreign words.
ǥ.....between k and g.
h.....as in he.
i .....as in pique.
ɪ .....as in pick.
k .....as in kick.
l .....as in lull.
ɫ .....as with a faint ɿ following.
m ....as in mum.
n .....as in nun.
ñ .....as ng in sing.
o .....as in note.
ŏ .....as in whole, (German soll).
p.....as in pipe.
r .....an initial uvular r.
s .....as in sauce.
t .....as in touch.
td ....heard now as t, now as d, or between.
u .....as in rule.
û.....as in pull.
û.....as in but.
ɑ.....like the German ŏ in Göthe.
v.....as in valve.
ʌ.....a synthetic sound, v+w.
w.....as in wish.
y.....as in you.
hy....as in hue.
ñg ....as in finger.
ny....as ny in canyon.
tc ....as ch in church.
t'.....an exploded breathing.
d' ....an exploded breathing.
k' ....an exploded breathing.
p' ....an exploded breathing.
x.....a k sound with an expulsion of breath before sounding it.
ɱ .....an m with lips closed.
'=exploded breathing.
'=laryngeal closure.

THE PIMA INDIANS

By Frank Russell

INTRODUCTION

From November, 1901, until June, 1902, the writer made his headquarters at Sacaton (see pl. I), on the Gila River reservation, in southern Arizona, where he was engaged in a study of the Pima tribe. With the aid of five native interpreters information was obtained from ten Pima men and women,[a] selected because of their intelligence and special aptitude in certain lines. With so many persons engaged in the investigations, the work of one frequently overlapped and served as a check on that of another. This made it possible to obtain a quite full account of Piman ethnology for the time employed. A house-to-house canvass of the villages, week after week, month after month, led to personal contact with nearly every household on the reservation and visits were made also to the Salt River Pimas and the desert Kwahadk's. One valuable result was the collection of more than 300 specimens illustrative of nearly all Piman arts, gathered from among a people whom poverty had induced to dispose of so many of their

[a] The name and a brief sketch of each of the author's informants and interpreters are here given:

Informants. Kâ'mâl tkâk, Thin Leather (pl. XLIV, *b*), an old man, is said to be the most popular of the few remaining narrators of myths and speeches, or "speakers." He is an intimate friend of the head chief, Antonio Azul (pl. II, *a*), and has always occupied a prominent place in the councils of the tribe. In his prime he exceeded 6 feet in stature and was strong and sturdy of frame. Indeed, his hand grasp is yet vigorous enough to make his silent and friendly greeting somewhat formidable. Intelligent, patient, dignified, his influence must have been helpful to those youths who formerly came to him for instruction. From him was obtained the cosmogonical myth of the tribe, many speeches, songs, and much general information. He also made a model of a loom and a few other specimens for the collection of material pertaining to the Pimas.

Sala Hina, Sarah Fish, or Hina (fig. 51), as she was called by her people, was recommended as one of the most intelligent of the older women. An earnest Christian, she had no scruples about relating all that she knew concerning the religious beliefs of the tribe. She had undergone a long and exacting training in practical botany which rendered her a valuable assistant in gathering information concerning the economic plants of the region. Taught by gaunt Hunger, she and her kind had learned to know and use a large number of vegetal products. She inherited through her father some of the Kwahadk' potters' skill, which enabled her to impart valuable knowledge of the art and to furnish specimens.

Sika'tcu, Dry, an old woman, is the half sister of Antonio Azul and is one of the best known nurses and midwives about the Sacaton settlement. Though unable to speak English, after a few interviews with an interpreter she was quick to understand by means of signs and a few Pima words when to pose for photographs and the like. Among her earliest recollections was the sight of the covered wagons of the emigrant trains that followed the Gila route in such numbers during the early years of the California gold excitement. Her memory therefore extends over a quarter of a century of the period of bitterest

old belongings that for a month or two after going into their midst there seemed but little opportunity of securing anything approaching a representative series. Several specimens that were finally discovered are believed to be the very last of their kind among the Pimas, though of course such a statement must be made with reserve. Prof. J. J. Thornber, of the University of Arizona, accompanied the party on a round trip of 80 miles along the Gila river and to him the collection is indebted for about 50 herbarium specimens, representing the larger portion of the economic plants of the Pimas that are susceptible of preparation in this way. To him also is due the credit of examining and identifying the mass of material gathered by the persons engaged at Casa Blanca and Gila Crossing. As complete a list as possible of the plants used for food, medicine, and the like was made, after which the services of both men and women were enlisted to point out the plants in the course of a trip through the river bottoms or on the hills. Furthermore, a number of sets of seeds was obtained, a portion of which were planted during the summer of 1902 for the purpose of raising plants that could not otherwise be identified. Unfortunately, the season proved too dry for them to germinate and the list is consequently less complete than it should be. The Pima name is given in all cases.

The American people owe the Pimas a lasting debt of gratitude. The California pioneers that traversed the southern route before the

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warfare between the Pimas and the Apaches. After several months acquaintance with this old woman Mrs Russell obtained from her much information concerning the Pima woman's views of warfare as well as knowledge of facts pertaining to various customs, especially those peculiar to her sex.

Antonio Azul (see pl. II, *a*) was the head chief of the tribe, and from him much information concerning war customs and recent history was obtained.

Ki'satc, Cheese, an old Santan pariah, had employed such wit as grudging nature had endowed him with in practising the arts of the medicine-man. His contributions, while of a minor character, proved to be of interest.

William Blackwater, an elderly Pima, had taken an active part in the later history of the village of Blackwater, which is situated at the eastern end of the reservation. He was employed but a short time and gave information concerning history and customs.

Ha'hali, or Juan Thomas, a Christian Pima who was formerly a medicine-man, contributed much valuable information concerning the "occult." He also furnished a calendar record and made a number of specimens illustrating the medicine-man's paraphernalia.

Tco'kŭt Nak, Owl Ear (pl. II, *b*), an old man, lived at the Salt River village and was the first from whom a calendar record was obtained.

Benjamin Thompson, so far as could be learned, kept the only calendar in the central group of villages about Casa Blanca, and he related the events that are commemorated by it.

Kâemâ-â, Rattlesnake Head (pl. II, *c*), a chief, is known to the whites as Joseph Head. He gave an excellent specimen of a calendar record and stick.

Interpreters. The principal interpreter, who was employed by the month during the entire period of the writer's stay, was José Lewis, a Papago who had lived from childhood among the Pimas. He had once been engaged by the Bureau of American Ethnology to write a vocabulary of his own language and to supply other information, so that he was acquainted with the phonetic alphabet and other approved methods of procedure. He was engaged in linguistic work the greater part of the time.

Melissa Jones, the official interpreter at the agency, was employed to interpret the statements of Sika'tcu, her mother, known to the whites as "Old Mary," and also at intervals on the calendars.

Jacob L. Roberts spoke quite as good English as the average white man of the country and was employed to secure Tco'kŭt Nak's calendar (pl. II, *b*) and for the final revision of the linguistic material.

Carl Smart, of Sacaton, and Thomas Allison, of Blackwater, were occasionally engaged as temporary interpreters. In addition to these there were half a dozen others who were employed for from one to three days each at the lower villages.

days of transcontinental railroads often owed their lives to the friendly brown-skinned farmers whom they met upon the Gila.[a] This tribe rendered notable assistance as scouts in the long contest with the Apaches. Even had they remained neutral, they would have deserved friendly consideration on the part of the whites, but as they fought bravely in the latter's behalf justice requires that their services be accorded proper recognition.

The Pimas live in two river valleys that are strewn with the ruins of prehistoric buildings and other evidences of the presence of a considerable population that had attained probably the highest degree of civilization or culture to be found north of Mexico. The present race has been variously regarded as the descendants of the one that has disappeared, as having amalgamated with it, and as being entirely independent of it. The determination of the exact relationship of the two groups has been held constantly in mind during the course of these investigations. Closely connected with this principal problem are those problems of the extent and direction of the migrations of men and culture toward the Sierra Madre, the Rio Grande, the Pacific, and the plateau to the northward. Was this a center of culture or was it a halting place in the march of clans?

HISTORY

Name

The tribe known as the Pimas was so named by the Spaniards early in the history of the relations of the latter with them. The oldest reference to the name within the writer's knowledge is that by Velarde: "The Pima nation, the name of which has been adopted by the Spaniards from the native idiom, call themselves Otama or in the plural Ohotoma; the word pima is repeated by them to express negation."[b] This "negacion" is expressed by such words as pia, "none," piatc, "none remaining," pimatc, "I do not know" or "I do not understand." In the last the sound of tc is often reduced to a faint click. The Americans corrupted this to "Pimos," and while this form of the word is now used only by the illiterate living in the neighborhood of the tribe, it is fairly common in the literature referring to them. They call themselves Â'-â'tam, "men" or "the people," and when they wish to distinguish themselves from the Papago and other

[a] Sylvester Mowry, lieutenant in the Third Artillery, in an address before the American Geographical Society, in New York, February 3, 1859 (Arizona and Sonora, 3d ed., 30), said: "Much as we pride ourselves upon our superior government, no measures [the United States Government have [sic] since, under urgent pressure of the writer, made some small appropriations for the Pima Indians] have been taken to continue our friendly relations with the Pimos; and to our shame be it said, it is only to the forbearance of these Indians that we owe the safety of the life of a single American citizen in central or western Arizona, or the carriage of the mails overland to the Pacific."

[b] "La nacion pima, cuyo nombre han tomado los españoles en su nativo idioma, se llama Otama y en plural Ohotoma, de la palabra Pima repetida en ellos por ser su negacion." Documentos para la Historia de Mexico, 4th ser., 1, 345.

divisions of the same linguistic stock they add the word â'kimûlt, "river." "River people" is indeed an apt designation, as evidenced by their dependence on the Gila.

Gatschet has thus defined the Pima linguistic stock in an article entitled "The Indian languages of the Pacific," which was published in the Magazine of American History:[a]

Pima. Dialects of this stock are spoken on the middle course of the Gila river, and south of it on the elevated plains of southern Arizona and northern Sonora (Pimería alta, Pimería baja). The Pima does not extend into California unless the extinct, historical Cajuenches, mentioned in Mexican annals, spoke one of the Pima (or Pijmo, Pimo) dialects. Pima, on Pima reserve, Gila river, a sonorous, root-duplicating idiom; Névome, a dialect probably spoken in Sonora, of which we possess a reliable Spanish grammar, published in Shea's Linguistics;[b] Papago, on Papago reserve, in southwestern Arizona.

VILLAGES

During the early part of the nineteenth century there were eight Pima villages on the Gila, according to statements made by Kâ'mâl tkâk and other old men of the tribe. The numerous accounts by travelers and explorers contain mention of from five to ten pueblos or villages. The names are usually those bestowed by the Spanish missionaries or unrecognizable renderings of the native terms. The villages were principally upon the south bank of the river, along which they extended for a distance of about 30 miles.[c] Some have been abandoned; in other cases the name has been retained, but the site has been moved. The first villages named by Kino were Equituni, Uturituc, and Sutaquison. The last two were situated near the present agency of Sacaton (pl. I). The first may have been the village of Pimas and Kwahadk's, which was situated west of Picacho on the border of the sink of the Santa Cruz river (fig. 1), which was abandoned about a century ago and was known as Akûtcĭny, Creek

[a] Vol. I, 156.

[b] The most valuable publication relating to the Pima language is the "Grammar of the Pima or Névome, a language of Sonora, from a manuscript of the XVIII Century." This was edited by Buckingham Smith, and 160 copies were issued in 1862. It is in Spanish-Névome, the latter differing slightly from the true Pima. The grammar has 97 octavo pages with 32 additional pages devoted to a "Doctrina Cristiana y Confesionario en Lengua Névome, ó sea la Pima."

[c] The Rudo Ensayo states that "between these Casas Grandes, the Pimas, called Gileños, inhabit both banks of the river Gila, occupying ranches on beautiful bottom land for 10 leagues farther down, which, as well as some islands, are fruitful and suitable for wheat. Indian corn, etc." Records of the American Catholic Historical Society, v, 128.

"The most important of these ranches are, on this side, Tusonimó, and on the other, Sudacson or the Incarnation, where the principal of their chiefs, called Tavanimó, lived, and farther down, Santa Theresa, where there is a very copious spring." (Ibid., 129.) This "spring" was probably above the present Gila Crossing where the river, after running for many miles underground in the dry season, rises with a strong flow of water that supplies extensive irrigating ditches.

Whipple, Ewbank, and Turner, writing in 1855, enumerate the following Pima villages: San Juan Capistrano, Sutaquison, Atison, Tubuscabor, and San Seferino de Napgub (see Pacific Railroad Reports, III, pt. 3, 123).

In 1858 Lieut. A. B. Chapman, First Dragoons, U. S. Army, completed a census of the Pimas and Maricopas. The names of the villages, leaders, and the population of both tribes are here reprinted

Mouth. The site of this settlement was visited by the writer in April, 1902. It is marked by several acres of potsherds that are scattered about the sand dunes on the south side of the dry river bottom that is scarcely lower than the level of the plain. A few Mexican families have lived in the vicinity for many years, pumping water from a depth of a hundred feet and depending upon crops of corn and beans raised in the summer when a few showers fall upon their fields. These Mexicans plow out stone implements and bits of pottery, but have never found any burial places.[a] There are two medium-sized adobe ruins on the flat river bottom; one of these has walls of the same pisé type that is exhibited by the Casa Grande ruin (pl. III), situated 25 miles to the northward.

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from S. Ex. Doc. 1, pt. 1, 559, 35th Cong., 2d sess., 1859. The number of Maricopas is included that the comparatively small importance of that tribe may be appreciated.

MARICOPAS

[Head chief, Juan Chevereah.]

Villages.	Chiefs.	Warriors.	Women and children.	Total.
El Juez Tarado	Juan Jose	116	198	314
Sacaton		76	128	204
		192	326	518

PIMAS

[Head chief, Antonio Soule [Azul].]

Buen Llano	Ojo de Buro and Yiela del Arispe	132	259	391
Ormejera No. 1	Miguel and Xavier	140	503	643
Ormejera No. 2	Cabeza del Aquila	37	175	212
Casa Blanca	Chelan	110	425	535
Chemisez	Tabacaro	102	210	312
El Juez Tarado	Cadrillo del Mundo and Ariba Aqua Bolando	105	158	263
Arizo del Aqua	Francisco	235	535	770
Aranca No. 1	La Mano del Mundo	291	700	991
Aranca No. 2	Boca Dulce			
		1,152	2,965	4,117

Mr Browne, a member of Commissioner Poston's party that visited the villages in January, 1864, wrote: "The number of Pima villages is 10; Maricopas, 2; separate inclosures, 1,000." (J. Ross Browne, Adventures in the Apache Country, 110.) On a later page (290) he gives the population by villages, of which he names but seven:

Aqua Baiz	533	Herringuen	514
Cerrito	259	Llano	392
Arenal	616		
Cachunilla	438	Total	3,067
Casa Blanca	315		

"There are 1,200 laboring Pimas and 1,000 warriors."

James F. Rusling (The Great West and the Pacific Coast, 369), who visited the Pimas in 1867, also states that there were then ten Pima villages.

[a] Font mentions a Pima-Papago village in this vicinity, called "Cultoa." Manuscript Diary, 35.

The villages known to the oldest Pimas are as follows:

1. Petâ'ĭkuk, Where the Petai (ash tree?) Stands.
2. Tcupatäk, Mortar Stone.
3. Tcu'wutukawutûk, Earth Hill.
4. Os Kâ'kûmûk Tco'tcikäm, Arrow-bush Standing.
5. Ko'-okûp Van'sĭk, Medicine Paraphernalia.
6. Kâ'mĭt, Back.
7. Tco'ûtĭk Wu'tcĭk, Charcoal Laying.

8 and 9. Akûtcĭny, Creek Mouth. One 5 miles west of Picacho and another southwest of Maricopa station. Both depended upon flood waters.

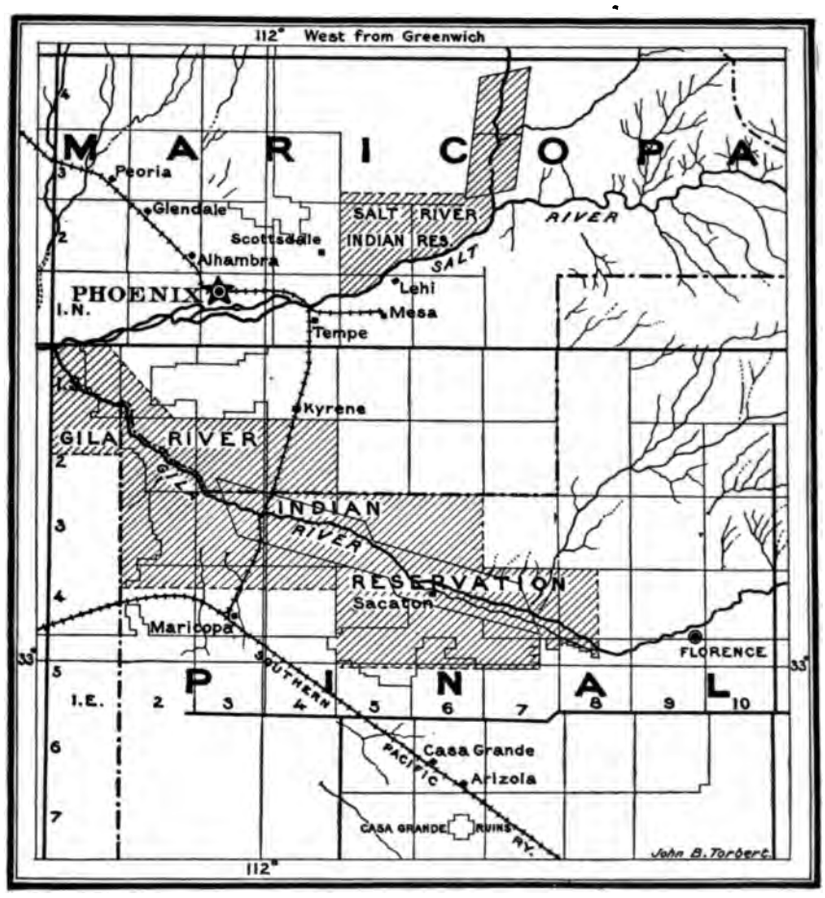

FIG. 1. Map of Pima reservation.

There are two Maricopa villages: Hi'nămâ, Hina Head (hina, a kind of fish) and Tco'ûtcĭk Wu'tcĭk, which is included among the Pima villages, as it was occupied by them after the Maricopas moved down the river to their present location below Gila Crossing. The Hi'nămâ people now reside on the south bank of the Salt, east of the Mormon settlement of Lehi.

The Pimas have a tradition relating the circumstances of the coming of the band of Sobaipuris,[a] whom they call Rsa'rsavinâ, Spotted, from the San Pedro. They are said to have drunk na'vait or cactus liquor together with a village of Pimas of forgotten name, on the north side of the Gila, near the present Blackwater and the Picacho village of Akûtcĭny, before the time when the Apaches forced them to leave their homes on the San Pedro.

Since the settlement of the Gila and Salt river valleys by the whites and the establishment of peace with the Apaches, the Pimas have again manifested a disposition to extend their settlements, principally owing, however, to the scarcity of water on the Gila River reservation. The present villages are as follows:

Os Kuk, Tree Standing, known as Blackwater.

We'tcu(r)t, Opposite, North Blackwater.

Ha'rsanykuk, Saguaro Standing, Sacaton Flats.

S'a'opuk, Many Trees, The Cottonwoods.

Tat'sĭtûk', Place of Fright, the settlement about Cruz's store.

Ku'-u Ki, Big House, Sacaton.

Ʌo'pohiûm, (?), Santan.

Hu'tcĭlttcĭk, Round Clearing, village below Santan on north bank of river.

Va'-aki, Ruin or Ancient House, Casa Blanca.

Stâ'tânnyĭk, Many Ants, a village between the two last preceding, on south bank of Gila.

Pe-ep'tcĭlt'k', Concave (from a family with noses of that shape), northeast of Casa Blanca.

Rso'tûk', Water Standing, northwest of Casa Blanca.

Skâ'kâĭk, Many Rattlesnakes, on north side of Gila, opposite Rso'tûk'.

Rsâ'nûk, Beginning, about a mile east of Sacaton station on Maricopa and Phoenix railroad.

Ka'woltûk' Wutca, Hill Below, west of railroad.

Hi'atam, Sea Sand Place, from Hi'akatcĭk, where the people of this village formerly lived. Hi'atam was just north of Maricopa station.

Kâ'matûk Wu'tcâ, Kâ'matûk Below, Gila Crossing. Kâ'matûk is the Pima name of the Sierra Estrella.

Herm'ho, Once, or Â'mû Â'kimûlt, Salt River, known by last name. This is the settlement on the north side of the river, 3 miles from Mesa.

Prehistoric Ruins

The Pimas have long since grown accustomed to being interrogated concerning the builders of the great stone and adobe pueblos that now lie in ruins on the mesas of the Gila and Salt river valleys. However ready they may have been in the past to claim relationship

[a] "The most warlike among all the Pimas are those we call the Sobiarpuris, for they are born and reared on the border of the Apaches; but they have become tired of living in constant warfare, and have, during the present year of 1762, abandoned their beautiful and fertile valley, retiring, some to Santa Maria Soanca, and some to San Xavier del Bac and to Tucson, thus leaving to the enemies a free entrance to the high region of the Pimas." Rudo Ensayo, translated by Eusebio Guitéras, Records of the American Catholic Historical Society, v, 192.

with the Hohokam[a] or relate tales of the supernatural origin of the pueblos, they now frankly admit that they do not know anything about the matter.[b] As early as the time of Kino and Mange mention is made of the chief of the former pueblo of Casa Grande, who was called "Siba." Mange in his Diary of November, 1697, translates this word as "bitter" or "cruel." The present pronunciation is sivan^{y} and the same name is given to all Hohokam chiefs; no one now knows the meaning of the word. The query arises, Is the similarity of this term to the native name for the Zuñis a mere coincidence? Mr Cushing states that "Cibola equals the 'Chi-vo-la' of Fray Marcus, of Nizza, equals the Zuñi name for themselves, namely, Shiwona, or Shiwina."[c]

Each ruin is called va-aki, ancient house, and in the myths a name is added to distinguish it from other ruins and to it si'van^{y} to identify him from other chiefs.

Following is the list of the best known places, with their chiefs:

Tco'-oltûk, Corner, Casa Grande. Ruled by Sĭa'-al Tcu-vtakĭ, Morning Blue.

Â-ât'kam Va-aki, Sandy Ancient House, Santan. Ruled by Kĭa'-atak, Handle.

S'o'am Nyu'ĭ Va-aki, Yellow Vulture Ancient House. Name of chief not known to my informants.

The following names of chiefs are preserved in the myths, but the ruins are referred to simply as va-aki:

Tcuf'haowo-o, Dipper, was the sivan^{y} at the ruin situated about 4 miles northwest of Santan. (Pl. IV, *a*, *b*.)

Ta'-a, Flying, lived at the Sweetwater pueblo. (Pl. IV, *c*.)

Tco'-otcuk Ta'tai, Black Sinew, at Casa Blanca.[d]

Tcu'narsat, Lizard, at Gila Crossing.

A'-an Hi'tŭpăkĭ, Feather Breathing, at Mesa.

Vi'-ĭk I'alt Ma'kai, Soft Feathers Rolling, ruled the pueblo between Tempe and Phoenix that is now being excavated by the Arizona Antiquarian Society.

When a single chief is referred to, he is usually called Si'van^{y}, and when the full name is given, Si'van^{y} is always added, so that it is not surprising that Mange, Bandelier,[e] and others should have sup-

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[a] The term Hohokam, That which has Perished, is used by the Pimas to designate the race that occupied the pueblos that are now rounded heaps of ruins in the Salt and Gila river valleys. As there is no satisfactory English term, the Pima name has been adopted throughout this memoir.

[b] "I made frequent inquiries of the Pimos and Coco-Maricopas as to the builders of these (Salt River ruins) and the ruins on the Gila, but could obtain no other than the ever ready, Quien sabe? These, as well as the ruins above the Pimo villages, are known among the Indians as the 'houses of Montezuma,' an idea doubtless derived from the Mexicans, rather than from any tradition of their own. We asked our Indian guide who Montezuma was. He answered, 'Nobody knows who the devil he was; all we know is, that he built these houses.'" Bartlett, Personal Narrative, 1854, II, 248.

[c] Congrès International des Américanistes, 7me sess., 1890, 155.

[d] The ruin at Casa Blanca (pl. V, *a*) is one of the largest south of the Gila. The adobe walls yet show at the level of the surface of the mound. Sedelmair states in his Relación that there were two houses standing at Casa Blanca in 1744. This and the ruin in Santan are the only ones near which the modern villages are built. Casa Grande is 6 miles from the nearest Pima village, which was, furthermore, quite recently established by families from points farther down the river.

[e] "While in New Mexico the chain of traditional information appears almost unbroken as far down as San Marcial, in Arizona the folk-lore of the Zuñi terminates, according to Mr Cushing, with the northern folds of the Escudilla and of the Sierra Blanca. The remarkable architecture prevalent on the

posed that the Casa Grande pueblo was under the control of "Siba" or "Si'van^{y};" indeed it is now frequently designated "Si'van^{y} Ki" by the Pimas. Fifteen miles southeast of the Casa Grande ruin is the mountain ridge that rises abruptly from the nearly level plains which is known as Ta-a'tûkam or Picacho mountain. Picacho is an isolated peak south of the mountain. The pass between them, through which the main trail ran from the Pima villages to Tucson, and through which the railroad has been built, was one of the most dreaded portions of the overland trail when the Apaches were "out," as they were most of the time. To the northeast of the mountain is a small pueblo ruin that lies about 15 miles from the river, which is apparently the nearest water. It was probably occupied during a part of the year only. East of the mountain is a ruin called Kĭs'tcoĭt Vatcĭk^{c}, Table Tank; on the north is one known as Mo'-ok^{c} Vatcĭk^{c}, Sharp Tank; and at the foot of Ta-a'tûkam, on the west, is A'-alt Vap^{c}tck^{c}, Small Tanks. Southwest of the mountain were situated the Pima village of Akûtcĭny and the two pueblo ruins previously mentioned. There is another small pueblo ruin a few miles northwest of the site of Akûtcĭny, but no others of similar type are known to the writer at any point in Arizona south of Picacho. A personal examination of all the ruins of the southeastern part of the Territory has shown them to be of a different type from those of the upper and lower Gila and the Salt river valleys. The ruins along the San Pedro, it is true, extend to the southward of the parallel of Picacho, and it is believed to be desirable that some of them be explored. Superficially they resemble the ruins about Solomonsville, where cremation

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Salado, Gila, and Verde has no light shed upon it by their folk-lore tales. Here the statements of the Pimas, which Mr Walker has gathered, are of special value; and to him I owe the following details: The Pimas claim to have been created where they now reside, and after passing through a disastrous flood—out of which only one man, Ci-hŏ, was saved—they grew and multiplied on the south bank of the Gila until one of their chiefs, Ci-vă-nŏ, built the Casa Grande. They call it to-day 'Ci-vă-nŏ-qi' (house of Ci-vă-nŏ); also 'Văt-qi' (ruin). A son of Ci-vă-nŏ settled on lower Salt river, and built the villages near Phoenix and Tempe. At the same time a tribe with which they were at war occupied the Rio Verde; to that tribe they ascribe the settlements whose ruins I have visited, and which they call 'O-ŏt-gŏm-văt qi' (gravelly ruins). The Casa Blanca and all the ruins south of the Gila were the abodes of the forefathers of the Pimas, designated by them as 'Vĭ-pĭ-sĕt' (great-grandparents), or 'Ho-ho-qŏm' (the extinct ones). (Ci-vă-nŏ had twenty wives, etc. ['Each of whom wore on her head, like a headdress, the peculiar half-hood, half-basket contrivance called Ki'-jo.' Papers Archeol. Inst., IV, 463.]) At one time the Casa Grande was beset by enemies, who came from the east in several bodies, and who caused its abandonment; but the settlements at Zacaton, Casa Blanca, etc., still remained, and there is even a tale ['It is even said that the people of Zacaton made war upon their kindred at Casa Blanca and blockaded that settlement by constructing a thorny hedge around it. Through the artifices of the medicine-men the hedge turned into a circle of snakes.' Papers Archeol. Inst., IV, 464] of intertribal war between the Pimas of Zacaton and those of Casa Blanca after the ruin of Casa Grande. Finally, the pueblos fell one after the other, until the Pimas, driven from their homes, and moreover decimated by a fearful plague, became reduced to a small tribe. A portion of them moved south into Sonora, where they still reside, but the main body remained on the site of their former prosperity. I asked particularly why they did not again build houses with solid walls like those of their ancestors. The reply was that they were too weak in numbers to attempt it, and had accustomed themselves to their present mode of living. But the construction of their winter houses—a regular pueblo roof bent to the ground over a central scaffold—their organization and arts, all bear testimony to the truth of their sad tale, that of a powerful sedentary tribe reduced to distress and decadence in architecture long before the advent of the Spaniards." Bandelier in Fifth Ann. Rep. Archeol. Inst. Am., 1883-84, 80, 81.

was the prevailing mode of disposing of the dead, as it was also on the lower Gila and the Salt river. Nothing was learned to indicate that the Sobaipuris of the San Pedro practised incineration. If some of the clans of the Hopis or Zuñis are to be identified with the Hohokam of the Gila, as is maintained by some of the most able authorities upon Southwestern archeology,[a] how is the total disappearance of this primal custom to be explained?

There is a strong belief among the Pimas that they came from the east. It is in that quarter that the abode of their dead is located. Their gods dwell there. Their beliefs do not seem to have been influenced in this respect in the least through contact with the tribes of Yuman stock who have sought a paradise in the opposite direction. There are vestiges of a tradition that the Pimas were once overwhelmed by a large force of warriors who came from the east and destroyed nearly all the people and devastated the entire Gila valley. This does not appear to be another version of the account of the invasion by the underworld clans. While the majority of the Pimas declare that their people have always lived where they now are, or that they came from the east, there are some who say that the Hohokam were killed by an invasion from the east before the Pimas came.

The Pimas formerly regarded the ruins with the same reverence or aversion which they felt toward their own burial places. After the excavations made by the Hemenway Expedition on the Salt river, as no disasters followed the disturbance of the dead, they grew less scrupulous and can now readily be hired as workmen to excavate the ruins or ancient cemeteries.

Contact with Spaniards

From the meager records of the Coronado Expedition of 1540–1542 it has been surmised that Chichilticalli was the Casa Grande, but this statement lacks verification. After traversing the entire southern and eastern part of Arizona the writer can not but believe that it is extremely improbable that Coronado saw the Casa Grande and the

[a] The earliest mention of the Gila origin of the Hopi theory is that of Garcés: "Also they knew that I was padre ministro of the Pimas, who likewise are their enemies. This hostility had been told me by the old Indians of my mission, by the Gileños, and Coco-Maricopas, from which information I have imagined (he discurrido) that the Moqui nation anciently extended to the Rio Gila itself. I take my stand (fundome, ground myself) in this matter on the ruins that are found from this river as far as the land of the Apaches, and that I have seen between the Sierras de la Florida and San Juan Nepomuzeno. Asking a few years ago some Subaipuris Indians who were living in my mission of San Xavier if they knew who had built those houses whose ruins and fragments of pottery (losa for loza) are still visible—as, on the supposition that neither Pimas nor Apaches knew how to make (such) houses or pottery, no doubt it was done by some other nation—they replied to me that the Moquis had built them, for they alone knew how to do such things, and added that the Apaches who are about the missions are neither numerous nor valiant; that toward the north was where there were many powerful people; 'there went we,' they said, 'to fight in former times (antiguamente); and even though we attained unto their lands we did not surmount the mesas whereon they lived.'" Diary in Coues, On the Trail of a Spanish Pioneer, New York, 1900, II, 386, 387.

neighboring Pima villages. For a century and a half after that invasion no white man is known to have reached the territory of the Pimas Gileños.

The earliest as well as the most important explorer in the history of Pimería Alta was Father Eusebio Francisco Kino, who, between the years 1687 and 1710, journeyed many a dusty, thirsty league in the eager search for souls. In 1694 he reached the Casa Grande in company with native guides who had informed him of the existence of the ruin. Absolutely nothing is known about this expedition except that a mass was said within the walls of Casa Grande. However, it may be safely inferred that Kino visited the near-by Pima villages. As the Papagos were at that time also called Pimas it is sometimes difficult to determine what part the true Pimas played in the events chronicled by the padres. Yet it is probable that they are referred to in the account of the religious festival which was observed in 1698 at Remedios, in Pimería Baja. Among the visitors were "native chieftains from as far north as the Gila valley." Then as now the Pimas and Papagos were on a friendly footing, and the character and movements of the Spaniards must have been made known to the Pimas before the latter saw Kino or any other white man.

Kino diligently strove to establish missions among the many tribes that he visited, but was much hampered by lack of funds. He succeeded in interesting the authorities sufficiently to induce them to send a military expedition to the Gila in 1697 for the purpose of ascertaining the disposition of the Pimas. The party included 20 soldiers, with 3 officers. Juan Mateo Mange was sent with Kino to write the official reports of the expedition. On the upper San Pedro river 30 Sobaipuris joined the party, which followed that stream to the Gila. They reached the Pima villages on the 21st of November, visiting and for the first time describing the Casa Grande. The return was by the more direct route of the Santa Cruz valley. It was by this route also that Kino in September, 1698, again descended to the Pimas with a small party of native guides. He returned by way of Quijotoa (?) and the Gulf.

Early in 1699 Kino, in company with Mange, made his fourth journey to the Pimas by way of Sonoita and the lower Gila. The return was by way of the Santa Cruz.

A year later Kino again reached the Gila by a new route. From a point above the Bend, and hence doubtless among the Pimas, he descended to the mouth and returned to Sonora by way of Sonoita.

In 1702 he made his sixth and last journey to the Pimas, going by way of Sonoita and the lower Gila. Among the "40,000 gentiles" whom he is said to have baptized there were quite a number of Pimas, but as his sojourn among them was never of more than a few days' duration his influence could not have been very great. Nevertheless,

he gave away great quantities of beads, and as the people already valued highly those of their own manufacture it is probable that they readily accepted Kino's statement that magic power resided in the new beads of glass. At any rate, the writer has found very old glass beads on all Piman shrines and has no doubt that some of them were brought by Kino. The first horses, also, to reach Pimería were brought by these expeditions. There is no record of any cattle being brought so far north, though they were generally distributed to the Papago rancherias in Kino's time.

After the death of Kino, in 1711, no Spaniard is known to have reached the Gila or even to have entered Arizona for a period of more than twenty years. In 1731 two missionaries, Father Felipe Segresser and Juan Bautista Grashoffer, took charge of the missions of San Xavier del Bac and San Miguel de Guevavi and became the first permanent Spanish residents of Arizona. In 1736–37 Padre Ignacio Javier Keller, of Suamca, made two trips to the Pima villages on the Gila, where he found "that many of the rancherias of Kino's time had been broken up."[a] Again in 1743 Keller went up to the Pimas and endeavored to penetrate the Apache country to the northward. Communications by means of native messengers indicated a desire on the part of the Hopis to have Jesuit missionaries come to them from Sonora. The point of greatest interest to us is that any communication should have existed at all. Keller failed in his attempt on account of the hostility of the Apaches, and Sedelmair, who tried to make the journey in the following year, was unable to induce the Pimas or Maricopas to accompany him. In 1748 Sedelmair reached the Gila near the mouth of the Salt river and journeyed westward. Of his trip to the Gila in 1750 little is known.

Accounts of these earliest missionaries of course preceded them by means of Papago messengers, who doubtless made clear the distinction between the slave-hunting Spanish adventurers and the Jesuits and Franciscans. Fortunately for the Pimas they were quite beyond the reach of the former and were so remote from the Sonoran settlements that only the most devout and energetic friars ever reached them.

The first military force to be stationed in Arizona was a garrison of 50 men at Tubac, on the Santa Cruz. This presidio was moved to Tucson about 1776, and in 1780 the garrison was increased to 75 men. Even when at Tucson the influence of this small force on the Pimas could not have been very great. Between 1768 and 1776 Padre Francisco Garcés made five trips from San Xavier del Bac to the Pimas and beyond. The fifth entrada was well described in Garcés's Diary (admirably translated and edited by Elliott Coues under the title "On the Trail of a Spanish Pioneer"), though he exhibited a pitiful waste

[a] Bancroft, XVII, 362.

of opportunities for ethnological observation while among the Pimas.[a] From this time forward until the American occupancy of the Gadsden Purchase in 1853 the Spanish and Mexican population of Tucson varied from 500 to 2,000, and there was more or less trade with the Pimas either at the post or through small trading parties that went from Tucson to the Gila villages.

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[a] Pfefferkorn, who published his Beschreibung der Landschaft Sonora in 1794-95, gives a very full account of the southern Pima-speaking tribes, but dismisses the "unconverted Pimas" in the following words:

"Hierauf folgen den *Gila* hinunter die noch unbekehrten *Pimas*, welche sich auf beyden Seiten des Flusses ausbreiten. Dieses Volk ist in drey zahlreiche Gemeinden gethellet: wovon die stärkeste ein anmüthiges mit Bäumen wohl besetzes Land von 14 Meilen bewohnet; welches durch Wasserleitungen, die sich wegen dem ebenen Boden mit geringer Mühe aus dem Flusse auf das umliegende Land führen lassen, befeuchtet, und fruchtbar gemacht werden kann." (Vol. I, p. 6.)

Padre Pedro Font, who accompanied Garcés in 1775, wrote an extended diary of the journey, in which he devotes a few pages to the Pimas. Following is a translation from a copy of the original manuscript, pages 48-52:

"First of November: Wednesday.—I said mass, which was attended by some Gileños Indians who happened to be there and who gave evidence of considerable attention, good behaviour, and silence. They sought to imitate the Christians in crossing themselves, which they did awkwardly enough, and in other things. We left the Laguna (Lagoon) at half-past nine in the morning, and at one o'clock in the afternoon we reached the town of San Juan Capistrano de Uturituc, after having travelled four leagues towards the west-northwest. This town consists of small lodges of the kind that the Gileños use. We were received by the Indians, whom I estimated to be about a thousand in number. They were drawn up in two rows, the men on one side and the women on the other. After we had dismounted they all came in turn to salute us and offered their hand to the Commander and the three Fathers, men and women, children and adults. Indeed they all gave token of much satisfaction at seeing us, touching their breast with their hand, naming God, and using many other expressions of benevolence. In short, their salutation was most lengthy, for almost every one of them bowed to us, saying: "Dios ato m' busi-boy," as do the Pimas Christians of Pimería alta, which signifies "May God aid us." We, on our part, must needs return their salutations. They lodged us in a large hut, which they constructed to that end, and in front of it they placed a large cross, Pagans though they were. The river being somewhat distant, the Governor ordered his wives to bring water, which they straightway carried to his lodge for the people. These Pimas Gileños are gentle and kind-hearted Indians. In order to fête our arrival they sought permission of the Commander to dance, and soon the women were moving from mess to mess, dancing after their fashion with hands clasped. In short, the whole people gave token of great pleasure at seeing us in their country, and some of them even offered us their little ones to be baptized. This we did not do, being desirous of proceeding with circumspection, although we sought to comfort them with good hopes. In the afternoon I went to the town with Father Garcés and the Governor, Papago de Cojat, to see the fields. These *milpas* are enclosed by stakes, cultivated in sections, with five canals or draws, and are excessively clean. They are close by the town on the banks of the river, which is large only in the season of the freshets. At that time its water was so low that an Indian who entered and crossed it had the water but halfway up his leg. From what they have told me, this is the reason they had not yet made their sowing, for inasmuch as the river was so low the water could not enter the canals. They also told me that to remedy this need they were all anxious to come together for a council, and had already thought of sinking many stakes and branches into the river to raise the water so that it might enter the drains; this industry on their part is a proof of their devotion to toil and shows that they are not restless and nomad like other races, for to maintain themselves in their towns with their fields they themselves have contrived to hold and control the river. I also saw how they wove cloaks of cotton, a product which they sew and spin; and the greater number of them know how to weave. They own some large-sized sheep whose wool is good, and also Castilian fowl. These Indians are somewhat heavy in build, very ugly and dark, the women much more so than the men. Moreover, perchance on account of their excessive eating of *pechita*, which is the husk of the crushed mesquite made into a gruel, of screw bean, grass seed, and other coarse foods, a very foul odor may be noticed when they are gathered in groups. This evening the Commander presented them all with tobacco, beads, and glass trinkets, wherewith they were highly pleased. The distribution of these things lasted until night.

2nd Day: Thursday.—We began to say mass very early in the morning, and with the sacred vestments I carried with me and with those which Father Garcés brought from Tubac to use in Colorado river, we erected two altars. It being All-Souls day, we three Religious said nine masses. It was, moreover, a most notable and unheard of thing that in the river Gila so many masses should be said. They were attended by a goodly number of Indians, who preserved the utmost decorum and silence. We left the town of Uturituc at eleven o'clock in the morning, and about three in the afternoon we halted on the

Relations with Americans

CIVIL AND MILITARY EXPEDITIONS

Early in the nineteenth century American beaver trappers began to penetrate through the Apache-infested mountains that bordered Pimería on the north and east. Beaver were then fairly abundant in the mountain streams and down the Colorado Grande to the very end in the burning lowlands. The annals of the Pimas make no mention of these earliest visitors from the United States, but it is known that several parties reached the "Pimos Gileños," who were found uniformly friendly. The Patties, father and son, journeyed from the Rio Grande to trap beaver in the Gila country between 1825 and 1828, and in the latter year pushed on to California.[a] Kit Carson, with a party of trappers, returned from his first trip to California by this route during the winter of 1829–30. The famous trapper, Paul Weaver, inscribed his name on the walls of Casa Grande in 1833.[b]

Besides the self-reliant and well-armed trappers, a few parties of settlers made their way to California through the Gila valley while it was yet in the possession of the Mexicans, though the best-known route was then north of the Colorado canyon. With the opening of the new era of American ownership began the journeys of surveyors and explorers. The first military invasion was by General Kearney, with a party of 200 troopers, in 1846. Emory's excellent Notes of a Military Reconnoissance and Johnston's Journal give details of this journey with the first reliable information concerning the Pimas. Kearney was followed by Lieutenant-Colonel Cooke in command of the Mormon battalion, which opened a practicable wagon road to California by way of Tucson and the Pima villages. In his official report Colonel Cooke states:

> I halted one day near the villages of this friendly, guileless, and singularly innocent and cheerful people, the Pimos. They were indeed friendly, for they refused to surrender supplies that had been left at the villages to be held for the Mormon battalion, and they threatened armed resistance to the Mexicans who demanded the mules and goods.

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banks of the river Gila near the town of the Incarnation of Sutaquison, having journeyed more than four leagues towards the west and a quarter northwest. The Indians of the town came out to receive us and saluted us with tokens of great joy. Their number I estimated to be five hundred souls. On our way we passed through two other small towns. In this limited territory lies almost all the land occupied by the tribe of the Pimas Gileños. The soil here is very poor and raises a very sticky dust, on account of which and their wretched food the Indians are very ugly, dirty, and repulsive. The river Gila was dry in this region, so they obtained their water by digging wells in the sand. It is only during the season of freshets that the river is of any service for the seed lands and fields of the Indians. The banks of the river are covered with a grove of undersized cottonwood trees. In the evening tobacco was distributed among the Indians and glass beads were promised the women for the following day. We asked the Indians why they lived so far from the river, for formerly they had their town on its banks. They replied that they had changed its site because on account of the groves and woods on its banks they could defend themselves but ill against the Apaches, but that by living apart from the river they were able to have a clear field for pursuing and killing the Apaches when they came against their town."

[a] Pattie's Personal Narrative.

[b] J. R. Browne, Adventures in the Apache Country, New York, 1869, 118.

A battalion of dragoons under Maj. L. P. Graham marched westward to California by way of the Pima villages in 1848. Bancroft states that he has a manuscript diary from Capt. Cave J. Coutts, of this battalion, in which it is recorded that the Pimas were very hospitable and exhibited conspicuous signs of thrift.[a]

The parties of the Boundary Survey Commissioners passed down the Gila in 1851, and the account of the Pimas by J. R. Bartlett, the American commissioner, is by far the best that has been published thus far.[b] Bartlett's party returned eastward through the Pima villages in 1852.

In 1854 Lieuts. J. G. Parke[c] and George Stoneman began at the Pima villages the survey for a railroad which was destined to pass through just a quarter of a century later. In 1855 Lieutenant Parke, with another party, made a second survey and again visited the villages.

From the time of the discovery of gold in California, in 1849, parties of gold seekers, numbering in all many thousand persons each year, followed the Gila route, meeting with hospitality from the Pimas and almost equally uniform hostility from the Apaches. The location of the Pimas in the midst of the 280-mile stretch between Tucson and Yuma was a peculiarly fortunate one for the travelers, who could count upon supplies and if need be protection at a point where their journey otherwise must have been most perilous.[d]

The United States Government first recognized the value of the assistance rendered by the Pimas when by act of Congress of February 28, 1859, $1,000 was appropriated for a survey of their lands and $10,000 for gifts.[e]

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[a] History of Arizona and New Mexico, 479.

[b] Personal Narrative, 1854, 2 vols.

[c] "Their chiefs and old men were all eloquent in professions of friendship for the Americans and were equally desirous that we should read the certificates of good offices rendered various parties while passing through their country." Pacific Railroad Report, II, 5.

[d] "Since the year 1849 [they] have acted in the capacity of and with even more efficiency than a frontier military. They have protected American emigrants from molestation by Apaches, and when the latter have stolen stock from the emigrants, the Pimos and Maricopas have punished them and recovered their animals. Yet in all this time [ten years] nothing has been done for them by our Government." Extract from a letter in the Alta California, June 28, 1858, quoted in S. Ex. Doc. 1, pt. 1, 556, 35th Cong., 2d sess., 1859.

"A company of nearly one hundred of their best warriors was enlisted into the United States service in the latter part of 1865, which served one year with great credit to themselves and did much good service in quelling our common enemy. Seventy of them have just been mustered out [1867] of the United States service, after having performed six months' duty as spies and scouts, for which service they are invaluable." Report of Commissioner of Indian Affairs, 1867, 163.

[e] Following is a list of the articles distributed among the Pimas and Maricopas, as reported by Mowry:

444 axes.	36 hammers.	3 pairs tongs.
618 shovels.	48 rakes.	1 set stock and dies.
31 hand saws.	48 trowels.	12 file handles.
706 butcher knives.	12 screw-drivers.	36 hatchets.
516 hoes.	1 "carpenter shop."	120 picks.
240 sickles.	15 plows.	7 kegs nails.
48 files.	15 sets plow harness.	9 gross screws.
270 harrow teeth.	1 forge.	1,400 needles.
48 mattocks.	1 anvil.	1 box sheet tin.
72 whetstones.	1 vise.	4,000 pounds barley.
15 grindstones.	1 set sledges.	1 pint turnip seed.
36 hay forks.	1 cast-steel hand hammer.	

Mowry explains that a larger number of plows would have been included in this lot of tools and imple-

Maricopa Wells, near the lower villages, became an important stage station when the overland mails began to pass late in the fifties.[a]

With the advent of the stage, the emigrant and the military trains began the breaking down of the best that was old and the building up of the worst that was new. For a period of thirty years, or from 1850 to 1880, the Pimas were visited by some of the vilest specimens of humanity that the white race has produced. Until 1871 the tribe was without a teacher, missionary, or, to judge from their own story and the records of the Government, a competent agent. Bancroft has thus summarized the conditions prevailing during that period:

In many respects there has been a sad deterioration during forty years of contact with civilization, notably by acquiring habits of intemperance, prostitution, and pilfering; yet they are still vastly superior to most other tribes. For several years, from 1868, serious troubles with them seemed imminent. Presuming on their military services and past immunity from all restraint, they became insolent and aggressive, straying from the reservation, robbing travelers, refusing all satisfaction for inroads of their horses on the settlers' fields, the young men being beyond the chiefs' control. Swindling traders had established themselves near the villages to buy the Indians' grain at their own prices, and even manipulate Government goods, the illegal traffic receiving no check, but rather apparently protection from the Territorial authorities. Whiskey was bought from Adamsville or from itinerant Mexicans; the agents were incompetent, or at least had no influence, the military refused support or became involved in profitless controversies. Worst of all, white settlers on the Gila used so much of the water that the Pimas in dry years had to leave the reservation or starve. General Howard deemed the difficulties insurmountable, and urged removal. Had it not been for dread of the Pima numbers and valor, the Apaches still being hostile, very likely there might have been a disastrous outbreak.[b]

As early as 1859 Lieut. Sylvester Mowry, special agent, Indian Bureau, foresaw danger threatening the interests of the Pimas and wrote:

There are some fine lands on the Gila and any extensive cultivation above the Indian fields will cause trouble about the water for irrigation and inevitably bring about a collision between the settlers and the Indians.[c]

Again in 1862 Poston gave additional warning:

If in the eager rush for farms or embryo cities the land above them should be occupied by Americans, and their supply of water be reduced, it might produce discontent.[d]

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ments had not the Indian Department distributed a few plows a short time previously. (S. Ex. Doc. 2, 723, 36th Cong., 1st sess., 1859.) The gifts were distributed by Lieut. Mowry and the survey was made under his direction by Col. A. B. Gray.

This original survey contained 64,000 acres—much less than the Pimas claimed and actually required for their fields and grazing lands. The commissioners who negotiated with them assured the tribe that the present boundaries were but temporary limits to protect the people in their rights, and that the Government would enlarge the reservation later. This promise was made good by a survey in 1869, which added 81,140.16 acres (U. S. Statutes at Large, 1869, II, 401). In 1876 9,000 acres about the village of Blackwater were added to the eastern end of the reservation.

[a] "In August and September, 1857, the San Antonio and San Diego semimonthly stage line, under the direction of I. C. Woods, was established, James Burch acting as contractor. This continued till the Butterfield semiweekly line was put upon the route, in August, 1858, under a contract of six years with the Postmaster-General, at $600,000 a year." J. R. Browne, Adventures in the Apache Country, 19. The journey of nearly 2,500 miles was made in from twenty to twenty-two days.

[b] Bancroft's Works, XVII, 548.

[c] S. Ex. Doc. 2, 727, 36th Cong., 1st sess., 1859.

[d] Report of Commissioner of Indian Affairs 1863, 386, 1864.

Agent R. G. Wheeler protested against the diversion of the water of the Gila from the Pima reservation at the time the Florence canal was projected in 1886 and succeeded in gaining the attention of the Department of the Interior which instructed the Director of the Geological Survey to investigate the matter. As a result of the investigation the following facts were established:

(1) That the water supply of the Pima and Maricopa reservations under present conditions is no more than sufficient for the wants of the Indians.

(2) That the construction of a dam by the Florence Canal Company of the character represented in the correspondence will give the control substantially of all the waters of the Gila river.

(4) That if the water supply from the river be shut off, the Indian reservation would become uninhabitable.

Other facts were presented, but these are the essential ones that directly concern us here.[a] Notwithstanding the above finding, no effective efforts were made to prevent the water from being diverted from the reservation, and the result was nearly as predicted—a result that should bring a blush of shame to every true American. A thrifty, industrious, and peaceful people that had been in effect a friendly nation rendering succor and assistance to emigrants and troops for many years when they sorely needed it was deprived of the rights inhering from centuries of residence. The marvel is that the starvation, despair, and dissipation that resulted did not overwhelm the tribe.

AGENTS

In 1857 John Walker was appointed Indian agent for the territory embraced in the Gadsden Purchase, with headquarters at Tucson. The Pimas were of course within his territory, though his control over them could not have been very great with the agency separated from the villages by a 90-mile stretch of desert in the scarcely disputed possession of the Apaches. Walker presented no report to his superior at Santa Fé in 1858, but in 1859 gave some account of the condition of the Pimas.

In 1864 Charles D. Poston was appointed superintendent of Indian affairs for Arizona, but he resigned that year. He was succeeded by four others during the next eight years, at the end of which period the office was abolished. Abraham Lyons was appointed agent for the Pimas in 1862, and he also lived at Tucson. Ammi M. White, appointed in 1864, was a resident trader. He had built a mill at Casa Blanca, which was destroyed by the flood of September, 1868. Levi Ruggles, appointed in 1866, administered affairs from Tucson. During 1867 C. H. Lord acted as deputy agent. Fairly adequate adobe buildings were erected for the agent at Sacaton in 1870, and the agents

[a] U. S. Geol. Surv., Water-Supply and Irrigation Papers, no. 33, p. 10.

thereafter resided at that place. The present commodious dwelling was erected in 1883. Following is a list of the later agents, with the dates of their appointment:

Capt. F. E. Grossman, 1869.
J. H. Stout, 1871–1875, 1877–78.
Charles Hudson, 1876.
A. B. Ludlam, 1879.
E. B. Townsend, 1881.
R. G. Wheeler, 1881.
A. H. Jackson, 1882.
R. G. Wheeler, 1885.
C. M. Johnson, 1888.
C. W. Crouse, 1889.
J. R. Young, 1893.
Henry J. Cleveland, 1897.
Elwood Hadley, 1898.
J. B. Alexander, 1902.

SCHOOLS

The first school (pl. v, *b*) among the Pimas was opened by Rev. C. H. Cook, in the employ of the Government, February 18, 1871, in an adobe building about 2 miles west of the present agency of Sacaton. This day school had a good attendance from the first, and much of the present beneficial influence of the missionary may be ascribed to the command over the children which he obtained during the seven years that he occupied the position of teacher. The change to a boarding school located at the agency was made in 1881, and a Mr Armstrong was the first superintendent. The school buildings were destroyed by fire in November, 1888, and the mission church was occupied during the remainder of that year. The capacity of the school is now 225, though during our stay at Sacaton more than 300 were crowded in. Two and three children were apportioned to sleep in narrow single beds and even in the hospital the beds were overcrowded. For years the accommodations have been inadequate to receive all the children that desired education. Day schools at Gila Crossing and Salt River take care of a few, and three or four new buildings for day schools have been erected at Blackwater, Lehi, Maricopa, and Casa Blanca.

ANNALS

CHRONOLOGICAL RECORDS

Three chronological records have thus far been preserved from among the many that are supposed to have existed among the American tribes. The first of these to be published was the Walum Olam of the Delawares, the definitive edition of which was published by D. G. Brinton.[a] In 1877 Col. Garrick Mallery brought to light the "Lone-dog winter count" of the Sioux and subsequently secured several other records from the same tribe.[b] Recently James Mooney

[a] The Lenape and their Legends, Brinton's Library of Aboriginal American Literature, v, 1885.
[b] A Calendar of the Dakota Nation, Bulletin U. S. Geol. Surv., III, no. 1; also Fourth and Tenth Annual Reports of the Bureau of Ethnology.

has published a series of Kiowa calendars that resemble those of the Sioux, but are more distinctly calendric.[a]

In addition to these published records we have references to yet others that have wholly disappeared; references that can not now be verified. For example, the Iroquois are said [b] to have maintained a record of their exploits in war by means of war posts on which notches indicated the occurrence of campaigns and conventional characters denoted the number of scalps and captives taken. Events of a certain class were thus recorded in chronologic order. Among the Santee Sioux Clark [c] found a notched stick which he was assured represented the history of the tribe for more than a thousand years. Mooney suggests that this must have been used in connection with a chant similar to that accompanying the Walum Olam. However, it seems extremely improbable that any record should have survived the vicissitudes of an Indian camp for so long a period. The use of notched sticks for mere numeration is common enough in all cultures and among all peoples, but such a use as that made by the Santees is not, so far as known, mentioned elsewhere in the literature.

The writer was therefore greatly interested to discover no fewer than five notched calendar sticks among the Pimas. Two sticks were "told" to him by their possessors. The record covers a period of seventy years, dating from the season preceding the meteoric shower of November 13, 1833, as do the oldest of those discovered among the Kiowa. There are traditions of older sticks that have been lost or buried with their keepers. Juan Thomas, of the village of Blackwater, had lost his stick in some inexplicable manner, but he was continuing the history with pencil and paper, thus rendering it more nearly comparable to the calendars of the Plains tribes. It is noteworthy that the change from stick to paper introduced a tendency to use pictorial symbols rather than merely mnemonic characters, such as are most easily incised on the surface of a stick having clearly marked grain. Among the sticks there is an evident increase in the number and elaboration of characters which may be attributed to contact with the whites, though not to their direct influence, as the existence of the calendars has been almost entirely unknown to them.

The year begins with the saguaro harvest, about the month of June. At that time, also, the mesquite beans are ripening, as well as the cultivated crops. It is the season of feasting and rejoicing. No other annual occurrence can compare in importance with these festivities, so that it is not surprising that the years should be counted by harvests. The Lower California tribes, as described by Baegert

[a] Calendar History of the Kiowa, Seventeenth Annual Report of the Bureau of American Ethnology.
[b] J. E. Seaver, A Narrative of the Life of Mrs. Mary Jemison, 70; cited by Mallery.
[c] The Indian Sign Language, 211, 1885; cited by Mooney.

more than a century ago, similarly numbered the years. A space of three years would be expressed by the term "three pitahayas," "yet they seldom make use of such phrases."[a]

THE PIMA CALENDAR

It is said that when Elder Brother was leaving Pimería for the last time he told the people to count the tail feathers of the little bird, Gisap, which are twelve in number, and that they should divide the year into that number of parts. He gave them names for these parts, except for the coldest and the hottest months. The writer is disposed to regard the recognition of the "moons" as of recent origin. Not many have any names for them and these do not agree even in the same village. For example, the list of months given by the chief is quite different from that furnished by Kâ'mâl tkâk, and also contains references to wheat, which is of course modern.

The months according to Kâ'mâl tkâk.	*The months according to Antonio Azul.*
1. Harsany paihitak marsat, Saguaro harvest moon.	1. Peɩkanʸ paihitak marsat, Wheat harvest moon.
2. Tcokiapĭk, Rainy.	2. Harsany paihitak, Saguaro harvest.
3. Rsopol usapĭk, Short planting.	3. Tcokiapĭk, Rainy.
4. Varsa kakatak, Dry grass.	4. Rsopol usapĭk, Short planting.
5. Huhokiapkʿ, Winter begins.	5. Varsa kakatak, Dry grass.
6. Oam, Yellow.	6. Vi-ihainyĭk, Windy.
7. Kâ-âmak, Leaves falling.	7. Ovalĭk, Smell.
8. Aufpa hiâsĭk, Cottonwood flowers.	8. Ku-utco s'hupitcĭk, Big winter.
9. Aufpa i-ivakitak, Cottonwood leaves.	9. Kâmaki, Gray.
10. Koĭ i-ivakitak, Mesquite leaves.	10. Tcu-utaki, Green.
11. Koĭ hiâsĭk, Mesquite flowers.	11. Oam, Yellow.
12. Kai tcokolĭk, Black seeds on saguaros.	12. Kâ-âk, Strong.

As they have no winters the Pimas naturally do not have a "winter count." As there are two rainy seasons and neither is of any consequence as a general rule, while both are sometimes wanting altogether, they could not be expected to mark the flight of years by the recurrence of the rains. There are but two seasons in the Gila valley, one of torrid heat[b] and one of ideal weather throughout the remainder of the year. The onset of the former coincides with the harvest season and the new year is therefore adapted, albeit unwittingly, to seasonal change. The year mark is invariably a deep notch across the stick.

The records of the early years are memorized and there are few minor notches to aid in recalling them. The year notches are exactly alike, yet on asking a narrator to go back and repeat the story for a certain year the writer found that he never made a mistake. Taking the stick in hand he would rake his thumb nail across the year

[a] The aboriginal inhabitants of the Californian Peninsula in Smithsonian Report, 1864, 388.

[b] Maximum temperature recorded for a period of nineteen years at Phoenix was 119° F. Report of Chief of Weather Bureau, 1900-1901, I.

notch and begin: "That notch means," etc. The interpreter, either through imitation or because of the same mode of thought, would then take the stick and dig his thumb into the same notch before repeating the story in English. Both seemed to endow the stick and the particular notch with a definite personality in their minds. That notch looked exactly like its neighbors but it stood for something different, which was apparently recalled as much by the sense of touch as by that of sight.

Dots or shallow circular pits and short notches are the most common symbols on the sticks. These have no distinctive meaning, and are used for recording a great variety of events. The human figure is freely used, and may signify that a man killed Apaches or was killed by them, that he was bitten by a rattlesnake, struck by lightning, or, in short, any event relating to a man in any manner may be denoted by this symbol. The date of building railways was recorded by an ideogram, representing rails and ties. Only one symbol had come arbitrarily to designate a single event. This is the T which was used to record the "tizwin drunks," or festivals at which saguaro or agave liquor was brewed and freely imbibed.

NATURE OF THE EVENTS

It has been frequently observed that the records of the American Indians contain much that is trivial and oftentimes omit that which is important. There are obvious reasons for this that have been adequately set forth by Mallery,[a] and it must also be borne in mind that the relative importance of an event differs according as it is viewed by Caucasian eyes or by those of the American Indian. Judging by the early portions of the records, the conclusion might be reached that the purpose was to secure chronologic sequence, though the Pimas are not known to have had ceremonies that by their infrequent recurrence would require calendric regulation. However, the later years are so filled with events that the primary purpose is clearly narrative. They are therefore to be designated annals, rather than calendars. Moreover, the years are never named. "In this year the crops failed;" "In this year the floods overspread the whole valley," etc., but never, "This is the famine year" or "This is the flood year." Upon analysis the events recorded are found to be distributed as follows:

Battles or skirmishes	66
Infrequent phenomena, eclipses, floods, earthquakes, etc	14
Famines and years of abundance	5
Epidemics	11
Accidents, rattlesnake bite, lightning stroke, etc	13
Events relating to whites, but not to Pimas	19

[a] Tenth Annual Report of the Bureau of Ethnology, 271.

Relations with whites, building churches, etc. 21
Number of sorcerers killed 18
Changes of village sites 2
Races, relay, kicking ball, and horse races 7
Festivals in which liquor was brewed 25
Trivial events, including those of personal interest 13
Number of persons killed during drinking bouts 24

THE NARRATIVE

1833–34

Gila Crossing, Salt River. During the moon preceding the meteoric shower the Yumas, armed with clubs, bows, and arrows, attacked the Maricopa village. The Yumas surprised the Maricopas and captured their women, whom they surrounded and tried to take away with them. They were about to cross the Gila with their captives when the Pimas arrived and attacked them. The women took advantage of the confusion to escape into the chaparral. The Yumas fought bravely, but they were overpowered by numbers and few escaped to tell of their defeat.

In the early winter[a] the meteoric shower took place. This event was followed by heavy rains that caused floods in the Salt and Gila rivers. The spectacle of falling stars was to the Pimas an augury of disaster, and the succeeding floods were regarded as a punishment for sins which they had committed.. What the sins might be they did not know, but concluded that they must have offended some medicine-man who possessed great magic power. Many thought it must be the medicine-man KakU who brought this calamity upon them because they had not shown him the respect that he thought was due him. It is said that when the flood was at its height he climbed a cottonwood tree and thence proclaimed in a loud voice that he would perform certain miracles that would prove disastrous to them if they did not listen to him and show him respect.

Others declared that the floods were caused by the two sons of an old goddess, Takwa-artam. When she saw the flood threatening to overwhelm the Pimas and Maricopas she said to her sons: "Give me back my milk and then you can drown my people. The land is yet what it was when it was new." This puzzled the two brothers. They knew that they could not return the milk that had nourished them in infancy, so they did not allow the flood to rise any higher, but caused it to go down.

1834–35

Salt River. This year was long remembered because of the bountiful crops of wheat, corn, squashes, pumpkins, and watermelons that were raised. The desert mesas were carpeted with flowers and the

[a] November 13, 1833.

bloom of cacti further transformed them into gardens. "Our people worshiped the gods in grateful recognition for their protection; we danced unmolested by the murderous Apaches; we looked after the welfare of our households."

1835–36

Gila Crossing, Salt River. One summer afternoon when only women and old men were at home, the Apaches came and killed two Pimas, a man who was irrigating his field and a boy who was hunting doves. That morning the younger men of the village of Rsânûk had planned to have a rabbit hunt toward the north, but when the crier gave the final announcement it was to hunt toward the south. Thus it was that one side of the village had been left unprotected, and when the fighting men returned it was too late to follow the raiders and the revenge was postponed.

1836–37

Salt River. At the beginning of this year the fruit of the giant cactus was gathered and a large quantity of liquor prepared from it. All the men became intoxicated—too drunk to be on their guard against an attack from the Apaches. Early in the morning a woman started toward the hills to gather cactus fruit. She had not gone far when she saw a man mount a horse and start toward her. She suspected danger and walked backward for some distance before turning to flee. She got halfway to the village before she was overtaken by the Apache, with whom she struggled so desperately as to raise a cloud of dust. Those who were somewhat sober hastened toward the place, but too late to rescue the woman from being roped and dragged to death. However, they overtook the party of Apaches and killed five of them. Upon examining the dead Apaches it was found that their bodies were protected with rawhide armor; then the Pimas understood why their arrows had glanced off or jumped back.

Gila Crossing, Salt River. A year passed without a visit from the marauding Apaches. "We tilled our fields, danced our war dances, sang songs, kept up target practice, and exercised in the use of the shield."

1837–38

Gila Crossing, Salt River. One cold night in the spring a Pima at Rso'tûk was irrigating his wheat field by moonlight. Without thought of enemies he built a fire to warm himself. This the Apaches saw and came about him in the thicket. Hearing the twigs cracking under their feet, he ran to the village and gave the alarm. The Pimas gathered in sufficient numbers to surround the Apaches, who attempted to reach the hills on their horses. Two horses stumbled into a gully, and their riders were killed before they could extricate

themselves. The others were followed and all killed. "This was the only event of the year, and our people were undisturbed further in the practice of their customs."

1838–39

Salt River. Late in the spring a party of Pimas went to Tucson to buy clothing and other needed supplies. On their return they were ambushed and barely escaped massacre. The Apaches had concealed themselves on either side of the trail, and when the attack was suddenly made the Pimas were at first panic-stricken, but recovered sufficiently to repel their assailants, with the loss, however, of two men killed and a boy captured. This youth is said to have been a very handsome fellow, skillful in the use of the bow and arrow. Fearing a renewal of the conflict, the Pimas hastened home.

A few months later they obtained their revenge upon a party of Apaches who came to the villages to steal horses. The enemy were seen and chased across the river. On the way they were met by a party of Pimas, returning from a council, who called out to the approaching horsemen to ask who they were; on receiving no answer they shot one of them. An Apache called "Slender Leg" was pushed off his mule and two Pimas jumped off their horses and tried to hold him, but he was too strong for them and they had to tie him. He was taken to the well-swept plaza of the village, according to the Salt River calendar, or to an open alkali flat near the villages, as stated by the Gila Crossing annalist, where the people gathered and danced and sang around him. Two widows of men killed in an ambuscade earlier in the season walked four times around the outside of the circle of dancers, and then passed inside as an avenue was opened for them. They carried long clubs of mesquite, with which they beat the captive into insensibility.

1839–41

There are no events recorded for these two years on either of the two sticks that date back thus far.

1841–42

Gila Crossing, Salt River. The Maricopas of the village of Masakimûlt, accompanied by one Pima, went on a campaign against the Yumas. The enemy gathered to meet them and sent a messenger to tell them that they should leave aside their knives and bows and fight only with sticks. The Maricopas agreed to this, but the Pima said he had made his bow and arrows to use on the enemy and he would keep them in his own hands. The Yuma messenger showed the Maricopas where to cross the Colorado river and conducted them to the assembled Yumas on the farther side. It was agreed

that four from each side should engage in the combat, using sharp sticks about 6 feet long (lances) instead of the customary war club.

Four times each squad ran in a semicircle near the enemy's line; four times they approached each other before the fight began. At the first onslaught three Maricopas and two Yumas were killed; the Yumas killed the surviving Maricopa and retired to their line.

Then Pantatûk, "bravest of the Maricopas," ran his horse through the entire party of Yumas, striking many with his lance before being caught in the line of women behind the warriors. Kâûtci Pai, Hawk-tail, also rode through the Yuma lines, and is living to-day (1902).

Tcuwut Hakûtäny, Earth-crack, challenged a Yuma to single combat and was wounded, but recovered.

Then the fight became general, most of the Maricopas being killed. Many Yumas were also killed. The Pima killed so many with his arrows that they could not reach him with their lances, and he escaped, as did some Maricopas, and they reached home in safety. Ââpap Anton, Maricopa Antoine (pl. XLIII, *b*) also kept his bow and arrows, and when closely pressed by the Yumas exclaimed in the Pima language: "You can not catch me!" which somewhat confused his enemies and enabled him to escape.

1842–43

Salt River. In the autumn the Yumas again came to attack the Maricopa village, but did not attempt to surprise it. They formed in line of battle opposite the line of Maricopas, who were equally courageous. The war chiefs stood between the lines. Each man was armed with a club only. The Yuma chief said to his opponent: "I am ready to have you strike me first if you can." The Maricopa chief answered: "It is for me to let you try your club on me, because you want to kill me, and you have traveled far to satisfy your heart." In the personal combat which ensued the Yuma was killed, the sharp end of his opponent's club piercing his side. Then the fight became general, each attacking the man opposite him in the line. There were some Mohave Apaches with the Yumas who fought with bows and arrows. When they saw the line of Yumas wavering, they deserted them. The Yumas retreated some distance and again made a stand, and the fight ended in an indecisive manner, with perhaps a greater loss to the Maricopas than to the Yumas. After the fight the Mohaves wanted to scalp the dead enemy, but the Yuma chief said no, they might scalp some Yumas by mistake, and they must wait until these had been gathered from the field.

1843–44

Salt River. In the spring the Maricopas, Pimas, and Cocopas went on a campaign against the Apaches. They were scouting through the Verde valley west of the Four Peaks one afternoon when they saw a small band of the enemy. They were unable to overtake the Apaches, who kept sending up signal smokes. The next morning the number of Apaches had increased and formed a circular line, which attacked the allies, who lost two men, father and son.

Four days later a woman went with her daughter to gather cactus fruit for drying. She was accompanied by her husband, who went as a guard. While she was busy gathering the spiny cactus, she heard a step and, turning, saw an Apache. She screamed for help and told her daughter to run to the village and give the alarm. The husband was hunting near at hand, but was too far away to rescue his wife. The little girl brought the men of the village, but they could find no trace of the enemy.

A few days later the Apaches killed a party of Pimas who had gone to the mountains to gather mescal. The Pimas had planned to go to the Kwahadkʿ camp, but changed their minds and camped opposite them. The Apaches sent down scouts from the hills to see how many there were at the place where the smoke from the mescal pits was seen. It was a night attack and many Pimas never wakened to see another day; only one escaped to tell the Kwahadkʿs of the massacre. They followed the trail of the Apaches but did not overtake them. The dead were buried there by the Kwahadkʿs, who knew the Pimas well.

In the summer, when the watermelons were ripe, a large force of Yumas came to attack the Pimas and Maricopas. Their coming was heralded by messengers, who said they were advancing in great numbers as gaily as for a dance. The Maricopas were ready to meet them, but the Pimas were not. The Maricopas went out to engage the enemy and check their advance while the women got out of the way. The Yumas were driven back, but the Maricopas lost two of their bravest warriors.

1844–45

Salt River. The next year the Yumas and Mohaves came to attack the Maricopa village. The fight was undecided, but the enemy retreated. One Pima and several Maricopas were killed.

Gila Crossing, Salt River. A plague swept through all the tribes during this year. Those stricken with it usually died within twenty-four hours, but if they recovered they were well again in three days. From 4 to 10 died each day. The people of Akûtcĭny came to the Gila and the Gila villagers fled into the desert. The [cholera or]

tcoko vihâsĭk, "black vomit,"[a] as it was called, brought all the medicine-men not in the best repute under suspicion. Four were killed, and the surviving medicine-men were kept busy guarding the camps against the plague.

Gila Crossing. During the winter, when ice was on the water and snow was evenly sprinkled on the lowlands, the Apaches came to the village of Rsânûk, where one of the marauders was killed. The Apaches, accompanied by the Päsĭnâ tribe from the north, attacked the Papagos at Kihotoak (Quijotoa) in April as the mesquites were changing from bud to leaf. The Apaches advanced with drums beating and with cries like the howl of the coyote. The Papagos were few in number, so they concealed their women in a cave and sought to protect them by fighting outside, but the enemy had firearms and all the Papagos fell in the futile attempt to preserve their loved ones from slavery. There yet lives a Pima who was shot through the leg and left for dead on the field of this battle. Many Apaches were wounded but none were killed.

1845–46

Gila Crossing. A party of Apaches was encamped on Mo'hatûk mountain, and two of them came to steal corn from the fields at Gila Crossing. The theft was discovered and three Pimas lay in wait for the thieves. When they again entered the field those lying in wait sprang upon them and killed one; the other escaped.

Salt River. During the winter the Pimas went on a campaign against the Apaches, several of whom were killed. The attacks were made at night and the enemy were killed before they could defend themselves. One Pima was killed and one wounded so severely that he died after returning home.

In the spring the Apaches waylaid a party of Pimas who were returning from a mescal-gathering expedition in the mountains. Nearly all the party were killed and two girls were made prisoners. The Apaches were followed, most of them killed, and the girls rescued by a party from the villages.

1846–47

Gila Crossing. Three Apaches were going toward the Papago village near Mââtcpät, or Table mountain, when a Pima, coming to the Gila river, crossed it and discovered their trail. A party went in pursuit and succeeded in killing all three. Kâ'mâl tkâk's brother was in this party of Pimas and was himself killed a few days later in an

[a] "Aquellas gentes y sus ministros gozan por lo general de buena salud: entre los naturales pasan muchos de cien años, excepto los pimas altos que segun se cree por razon de las aguas y sombrío cauce de sus arroyos, son espuestos á diversos achaques. El mas temible entre ellos es, el que llaman *saguaidodo* ó vómito amarillo." Alegre, Historia de la Compañía de Jesus en Nueva-España, II, 213.

ambush into which the Pimas were lured in the Santan hills. One other Pima was killed in this engagement and many were wounded, but no injury was inflicted on the Apaches.

The Pima Kwakrsân was surrounded by the enemy, who clung to him and to his horse and sought to pull him down; but he had spurs on his feet and striking them deeply into his horse's flank he caused the animal to rear and throw the man who was holding its head, high in the air. In the confusion he escaped.

Salt River. The Apaches came one moonlight night to steal horses. Leaving their own mounts tied in the brush, they crept toward the houses near which were the Pima ponies. They were discovered and pursued to the river, where all were killed in a running fight.

1847–48

Gila Crossing. The Rsânûk villagers went to Kâ'matûk to hunt deer. They were seen coming by the Apaches, who lay in wait at the spring, and two were shot before they could reach cover.

Salt River. The Apaches came to Santan early one morning and killed four Pimas. They were chased, overtaken, and five of them killed before pursuit was abandoned.

1848–49

There is no record for this year upon either calendar stick.

1849–50

Gila Crossing. Three Apaches were discovered approaching the villages and a party was sent out on horseback to attack them. They fled to a hill near Tempe, where they hastily built up a wall of stone, behind which they maintained themselves until nearly sunset, when a Pima led his party inside the Apache breastwork and the enemy were killed.

1850–51

Gila Crossing. The Yumas came again to attack the Maricopas They surprised the village, killed several, and carried their property to a hill near by, where they sang and danced, saying that they were waiting for the Maricopas to bring their friends, the Pimas, to be defeated next. But they underestimated the number and valor of the Pimas, who soon put them to flight, leaving many of their dead upon the field. One of their chiefs, known to the Pimas as Vĭsakikitoʌa[(t), when he saw most of his men fallen, came back saying he did not wish to escape alone. He had but a knife in his hand and was killed with arrows.

The remnant of the party took refuge in a thicket near the Estrellas, where the pursuers rushed in upon them with horses and killed all. Many Pimas were wounded but none killed. A strand of hair was

cut from the head of each fallen Yuma, but these have since been lost or buried. There were 134 Yumas killed; their bodies were left on the field.

1851–52

Gila Crossing. Two Apaches were discovered near the Maricopa village by Whyenânâvĭm, a Maricopa warrior, who killed one of them before they could escape.

The Pimas went on a campaign against the Apaches on Salt river, near where the present reservation is located, and one of their number was killed.

Blackwater. In this year the Apaches raided a Papago village near Quijotoa, called Koĭ Tatk' (mesquite root).[a]

1852–53

For three years the Gila Crossing calendar has nothing but the year marks on it, and the keeper could recall no event for that period.

Blackwater. At the hill shaped "like a nose," in the Santans, the Apaches ambushed a party of Pimas and Maricopas. They sent six men to the Maricopa village, near which they discovered and killed some women. The Maricopa and Pima warriors pursued the Apaches, who retreated slowly, thus luring them within reach of the arrows of the waiting Apaches, who killed four Maricopas and one Pima. The survivors retreated to their supports, who were coming up in such numbers that the Apaches withdrew. The dead were burned that day north of the Santan hills.

At about the same time the Pimas killed four Apaches south of the villages.[b]

When the wheat was ripe [June] the Apaches were pursued north of the Santan hills and four of them killed. Three men are yet living who killed Apaches in this fight.

1853–54

Blackwater. The Apaches came to steal horses and brought a live vulture with them. They were discovered and several killed.

1854–55

Blackwater. The Apaches were reported by the Papagos to be stealing horses in their territory and the Pimas were requested to aid in driving the enemy out of the country. In the Rincon mountains, at Tâva Kosuwa, Turkey Neck, the horse thieves were overtaken and many of them killed. The horse's head indicates the purpose of the Apaches.

[a] The figure on the Blackwater stick is intended to represent a mesquite root.

[b] At a point about 15 miles from the Gila where the Southern Pacific now runs—just south of the reservation.

1855–56

Gila Crossing. Skââkoïk was approached one evening by seven Apaches, who were discovered and surrounded. Six escaped in the darkness, but one was tracked into the arrow bushes, where he dropped his bow. He was soon found to have secreted himself in a hole washed deep in the sand. The Pimas could not see or reach him, so they shook live coals down upon the fugitive, which caused him to yell and suddenly leap out among them. The apparition so startled everyone that no move was made to detain him. As he was passing through their line some asked those around them, "Can we catch him?" but he was such a giant and the peculiar manner of his appearance among them so unnerved for a moment the courage of the men whose deepest instinct was to crush out the life of the Apache, that he made his escape.

Blackwater. The Apaches, whom the Pimas attacked during a raid of this year, were grinding out mesquite beans from the dry pods when the arrows began to fall into their camp. A blind Apache was killed as his companions fled.

1856–57

Blackwater. The Pimas and Maricopas joined the white soldiers in a campaign against the Apaches under White Hat. Two Pimas were killed and two wounded, but no Apaches were injured. While the Pimas were on their way home still another of their party was killed. The Pimas burned their dead. Later they killed several Apaches who were raising corn on Salt river.

1857–58

Salt River. About the end of the year a band of Apaches came to the Pima villages one morning. They were discovered and chased 30 miles to Tempe butte, where they were surrounded. They hid themselves at the summit of the butte, but were all killed except one, who escaped into the brush.

In the summer the Yumas came again, accompanied by the Mohaves. They sent scouts ahead, who found the Maricopa women gathering mesquite beans. They killed all the women except one, whom they kept to act as a guide. She was the sister of a well-known Maricopa warrior, and they compelled her to lead them to her brother's home. When they reached it she was killed with a club and the man was chased, but he was as good a runner as he was fighter and they could not catch him. A Yuma told him to stop and die like a man, but he answered that if they could overtake him he would show them how to die like a man. The Maricopas fled from their village and the Yumas burned it. Messengers went to all the villages that day and under cover of the night the Pimas and Maricopas gathered. They kept coming until late the next forenoon. They found the

Yumas encamped near the river at a spot where they had assaulted some women and a Pima had been killed while defending them. The Yumas had spent the night in singing their war songs. Now and again a medicine-man would come forward to puff whiffs of smoke in order that their cause might find favor with the gods. The Pima-Maricopa council ended about noon and it was decided to surround the Yumas and to make special effort to prevent them from reaching the river to obtain water. Formed in a semicircle, the Pimas and Maricopas shot down the Yumas upon three sides. Soon the Yumas began to waver and become exhausted from thirst in the heat of the day. They made several attempts to break through the line, but failed, and finally gathered in a compact body to make a last attempt to reach the river. At that moment the Pimas and Maricopas who were on horseback rushed in upon the enemy and rode them down. After a hand-to-hand combat the Yumas were all killed except one, who was stunned by the blow of a club and lay unconscious under a heap of dead. During the night he recovered his senses and escaped. This was the bloodiest fight known, and the Yumas came here to fight no more.[a]

Blackwater. During the year Pimas were killed in two places by the Apaches; three south of the river and one north.[b]

1858–59

Blackwater. The meteor of 1859 was observed by the Pimas, who called it pai-ikam ho-o. During a raid into the Apache country three of the enemy were killed and also one Pima.

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[a] "In 1857, with Mohave, Cocopa, and Tonto allies, they [the Yumas] attacked the Pimas and Papagos up the river, and in a great battle were almost annihilated." Bancroft, Arizona and New Mexico, 501.

Cremony visited the Pimas as a captain in the California Column in 1862. In his Life Among the Apaches, 148, he mentions this conflict of the Pimas with their old enemies, saying: "The grazing ground to which we resorted during our stay near the Maricopa villages had been the scene of a desperate conflict between that tribe and the Pimos, on one side, and the Yumas, Chimehuevis, and Amohaves on the other. Victory rested with the Maricopas and Pimos, who slew over 400 of the allied tribes, and so humiliated them that no effort has ever been made on their part to renew hostilities. This battle occurred four years before our advent, and the ground was strewed with the skulls and bones of the slaughtered warriors."

For the Yuma side of the story see Lieutenant Ives's Report upon the Colorado River of the West, p. 45.

In a letter from an unnamed correspondent living among the Yumas or at Fort Yuma, to Sylvester Mowry, it is stated that the tribes engaging in this battle were the Yumas, Yampais, Mohaves, and Tonto Apaches, with one or two Dieganos [Dieguefios], against the Pimas, Maricopas, and Papagos. One thousand five hundred men were engaged on each side. The Yumas "lost not less than 200 of the flower of their chivalry." See S. Ex. Doc. 11, 588, 35th Cong., 1st sess., 1858.

The Blackwater annalist could give but little information concerning the victory over the Yumas, but he had recorded it upon the calendar stick by a fringed line, in itself meaningless.

[b] The two men in the figure are not meant to represent two killed, but that the events occurred in two places.

1859–60

Blackwater. The Pimas attacked a party of Apaches and killed a man and a boy. A white man who accompanied the Pimas was slightly wounded with an arrow.

1860–61

Gila Crossing. A plague which killed its victims in a single day prevailed throughout the villages. Three medicine-men who were suspected of causing the disease by their magic were killed, "and nobody was sick any more."

Blackwater. The one-armed trader sold his store to Ammi M. White during this year and for some reason unknown to the Pimas threw away his grain sacks.[a]

Two Pimas were killed by Apaches, but the details concerning the event are beyond recall.

1861–62

Gila Crossing. The trader, Ammi M. White, was captured by the "soldiers from the east."[b]

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[a] Probably to avoid contagion.

[b] "Early in 1862 a force of two or three hundred Texans, under Captain Hunter, marched westward from Mesilla and in February took possession of Tucson for the Confederacy. There was, of course, little opposition, Union men, if there were any left, fleeing across the line into Sonora. Not much is really known of Hunter's operations in Arizona so far as details are concerned, even the date of his arrival being doubtful. Besides holding Tucson, driving out men suspected of Union sympathies, confiscating a few mines belonging to Northerners, and fighting the Apaches to some extent, he sent a detachment to the Pima villages, and possibly contemplated an attack on Fort Yuma. But—to say nothing of the recent floods, which had greatly increased the difficulties of the route, destroying Gila and Colorado cities—the news from California was not reassuring, and Hunter deemed it best to retire.

"This news was to the effect that California troops were on the march eastward. These troops, about 1,800 strong, consisted of several volunteer regiments or parts of regiments organized at the beginning of the war, and which, on receipt of intelligence that Arizona had been invaded, were ordered to Yuma and Tucson, constituting what was known as the California Column, under the command of Colonel James H. Carleton. The main body of this army in detachments, whose exact movements now and later I do not attempt to follow in detail, left Los Angeles and was concentrated at Yuma in April, and in May followed the Gila route to Tucson. But previously Lieutenant-Colonel West, commanding the advance, had sent out some parties from Yuma, and these were the only troops that came in contact with the Confederates. Jones, in February, was sent with dispatches to Tucson and fell into the hands of Hunter, who released and sent him back by another route, bearing the first definite news that Tucson had been occupied. Captain William McCleave, of Company A, First Cavalry, being sent out to look for Jones, was captured, with three men, at the Pima villages on the 6th of April and was carried to Mesilla, where he was soon exchanged. Captain William P. Calloway was next sent up the Gila with a stronger force to rescue McCleave. At the Pima villages he heard of a Confederate detachment of 16 men, under Lieutenant Jack Swilling, and sent Lieutenant James Barrett with 12 men to cut them off. Pursuing the enemy into a chaparral, Barrett was killed, with two of his men, one or two of the foe being also killed and three taken prisoners. This was the only skirmish of the campaign with Confederates, and it occurred on the 15th of April at a spot known as El Picacho." Bancroft, XVII, 514.

Both the Gila Crossing and the Blackwater calendars mention the capture of White, but the calendrists can give no definite information concerning the events related by Bancroft. The trader was of vastly more interest and importance to the Pimas than the whole Confederate or Union army. He was agent for the Pimas, an office which he held until 1865. The writer has not found any account of his capture in the records of the period, but it is probable he was soon released. As soon as he was taken away, the Pimas took possession of his store and quarreled over the distribution of the stock of wheat on hand.

Blackwater. A man named Thomas [whether given name or surname could not be ascertained], who had been trading at Gila Crossing, took charge of White's store after the latter left. The soldiers from the west fought the soldiers from the east at Picacho and were defeated. Then a white man known to the Pimas as Has Viakam came from the east and traded with them.

[John] Walker[a] came from the west with the California Column and learned the Pima language at the same time that Thomas learned the Maricopa.

1862–63

Gila Crossing. The men of Rso'tûk went to the mountains about Prescott in search of Apaches during the summer of 1862. As they were following a mountain trail they caught sight of a man lying on his coat asleep. From his dress they could not be sure if he were an Apache or a Pima, so two men went to waken him. "How did you sleep?" said they. On hearing this the man sprang up and they saw that he was an Apache. One struck him on the head with his club, but he jumped and would have escaped had not the other shot him. Soon afterwards two Apaches came to the village of Akûtcĭny and their trail was discovered by two Pimas who were hunting for their horses. They followed the Apaches, who ran toward the Estrellas. The elder Pima was some distance ahead of the other when the leading Apache climbed the mountain and the other turned back to fight. The two men used their bows, each endeavoring to protect himself behind a clump of bushes. Finally, as they were chasing each other around the same clump of bushes, the Apache getting the better of the conflict, having wounded the Pima in the elbow and side, the other Pima came up and killed the Apache, who was called by the Pimas Whaiemââ.

Two Maricopas dragged the body of the Apache to a hill near Gila Crossing and tied it to a post, where it remained for some time. A friend of the dead Apache led a party of six to the place where he had fallen and followed the trail of the dragged body to where it stood tied. The friend wept and went away without attempting to remove the body. As the party returned up the river they entered an isolated house in which there were two old Maricopa men. They warmed themselves at the fire, but did not molest the old men.

Salt River. Two Apaches came near the villages and were seen by a man working in the fields; he called to his friends to help him and at once set off after the enemy. When the Apache who was farthest away saw that his companion was in danger he turned back and attacked the first pursuer. The other Apache escaped, but the braver one was killed. The Pimas returned home, but the Maricopas dragged

[a] See p. 33 for list of Pima agents.

the body to the buttes at the point where the Maricopa and Phoenix railroad now crosses the Gila and left it tied to a post. The Apache who ran away led a party of his people to recover the body, but it was afterwards ascertained from the tracks that they turned back just before reaching the spot.

A Pima was killed by the Apaches while the California Column was at the villages and a squad of soldiers accompanied the pursuing party of Pimas as far as the Estrellas, but the enemy escaped. The raid was in the saguaro fruit season "as shown by the red on the dead Pima" [or the month of June, 1862].

Blackwater. Two medicine-men, father and son, were killed during the year because of their supposed machinations against the people.

1863–64

Gila Crossing, Salt River. For a short time there was peace between the Pimas and Apaches. During this period the Maricopas killed two old men and captured a boy from a party of Apaches who came to the Maricopa village. The boy was sold to a half-brother of the trader A. M. White [named Cyrus Lennan], known to the Pimas as Satcĭny Vâ, Chin Beard.

This man took the boy with him on an expedition against the Apaches. There was a Mexican in the party who understood the Apache language, so that communication was opened with the enemy as soon as they were discovered. The whites placed flour, sugar, and other rations on blankets, and the Apaches, believing that the food was intended as a peace offering, came up to them. The soldiers were accompanied by three Pimas, but they had concealed them under blankets. They had stacked their guns, but retained their side arms concealed. At a signal from the leader of the party the Apaches were fired upon and nearly all of them were killed. Lennan was killed while following the escaping Apaches, but the Pimas killed the man who had thrust a lance into his breast.[a] The place has since been known as Yatâkit kʊ Kâkûta, Place where the snare was set.[b]

[a] Owl Ear states that Lennan shot the man who struck him and they fell dead together.

[b] As we have independent white testimony, it is interesting to compare it with the Piman account. In his Adventures in the Apache Country J. Ross Browne describes the engagement in which Cyrus Lennan was killed. It was at the "Bloody Tanks" and is known in history as King Woolsey's (infamous) "pinole treaty." A party of 26 whites had been pursuing a band of Apaches with stolen stock for several days until they ran out of provisions and sent to the Pima villages for supplies. They were joined by 14 Maricopas under the leadership of Juan Chivaria and Cyrus Lennan. The entire party under the command of King Woolsey camped on the Salt river in a small valley which could not have been far from the upper end of the Salt River canyon. As soon as the smoke of their camp fire arose they were approached by Apaches to whom "Woolsey sent Tonto Jack, an interpreter, to learn what they had to say, and at the same time to tell them it was not the wish of his party to fight them; that he wanted them to come down and he would give them some pinole." The Apaches were finally prevailed upon to enter the camp to the number of 30 or 35. After the display of some insolence on the part of the Apache chief Woolsey drew his pistol and shot him dead. "This was the signal for the signing of the treaty. Simultaneously the whole party commenced firing upon the Indians, slaughtering them right and left. Lennan stood in advance of the Maricopas and was warned by

Salt River. While peace prevailed between the tribes a party of Apaches came to the Pimas to trade goods for ponies. When near the villages they divided into two parties, one of which came on to trade and the other went around to try to steal horses. The thieves were followed and when it was found that their tracks joined those of the party at the villages the Pimas went back and killed many of those who were trading. Some of the Pima warriors overtook the horse thieves and killed several of them.

Blackwater. A Pima was killed by Apaches while looking for his horses near Kâ'matûk, the hill between Blackwater and the Sacatons.

1864–65

Gila Crossing, Salt River. This was the first year in which the Pimas were supplied with firearms (by order of General Carleton) and aided the United States soldiers.[a]

Salt River. The Pimas and Maricopas went on a campaign against the Apaches and met a band that had probably ambushed some American soldiers, for they had arms and other army property. The allies rushed the camp of the enemy and captured all that had been taken from the soldiers. When they returned with their spoils to the villages some whites accused them of having killed the soldiers. They told how they obtained the things, but the whites would not believe them. "That is why I do not think the white man is good enough to trust us," said Owl Ear. When several guides took the whites to the battle ground they were satisfied when they saw the dead Apaches there.

Blackwater. In a raid in this year two Apaches were killed and their ears cut off and nailed on a stick.

In an effort to establish peace with the Apaches, the soldiers and Pima scouts took a wagon loaded with rations to the Superstition mountains. The Apaches took it to be a hostile move and attacked the party, killing the driver of the wagon. The Apaches were pursued and several were killed before the trail was lost.

Woolsey to make sure of a lame Indian with a lance, who was eyeing him suspiciously. 'I'll look out for him,' was Lennan's reply, and the slaughter became general. * * * The fight, if such it could be called, lasted seven or eight minutes. Lennan had incautiously closed upon and shot an Indian near him, forgetting the lame one against whom he had been cautioned, who the next moment ran him through the body with his lance. Dye (a rancher) coming up, killed this Indian. The only person wounded was Tonto Jack, who was shot in the neck with an arrow. * * * Twenty Tontos and four Pinals lay dead upon the ground. Others were seen running off with the blood streaming from their wounds, and it is supposed some of them died." (P. 121.)

[a] John Walker, the first agent for the Pimas, in his report for the year 1860 stated that the tribe petitioned for more guns, as theirs were "few and old." See Report of Commissioner of Indian Affairs 1860, 168. In the report of J. L. Collins, superintendent of Indian affairs in New Mexico, it is stated that 100 muskets and 10,000 rounds of ammunition had just been given the Pimas. In ibid., 1862, 239, 1863.

1865–66

Gila Crossing, Salt River. The Pimas went on a campaign against the Apaches and one of their number was killed. His fellows burned the corpse with the bow and war gear. Dry ironwood was used in the cremation.[a]

In the same engagement another Pima was wounded and came home to die.

Gila Crossing. The Pimas soon afterwards went to the mountains north of Tempe to seek Apaches. Two of their party were killed and a third came home mortally wounded.

Blackwater. Another war party attacked an Apache camp, described as the one at which the children were playing and piling up gourds, and killed several of the enemy.

1866–67

Gila Crossing. Many died this year of a sickness characterized by shooting pains that resembled needle and knife pricks. One day the three medicine-men who were accused of having caused the disease came home drunk from the Gila Bend stage station and were set upon by their fellow-villagers. Two were killed and the other was seriously but not fatally wounded.

Gila Crossing, Salt River. This year was marked by a devastating fever at Rso'tûk and three medicine-men were killed there in the hope of stopping it.

Blackwater. A party of Pimas accompanied the soldiers to the Verde region and there killed a number of Apaches, among whom was a man with a very long foot.

1867–68

Gila Crossing. During this year a disease prevailed that from the description would seem to have been malaria. Many died, and the medicine-men were blamed, as usual, for the calamity. Two were killed before the disease abated.

Blackwater. The Pimas went raiding in the Superstition Mountain region and killed one Apache who was running away with his shield but who stumbled and fell.

1868–69

Gila Crossing. A heavy rain caused a flood which destroyed the store at Casa Blanca.[b]

This was known as the Vamati Teoki, Snake rain.

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[a] This custom of burning the dead is occasionally referred to in these annals, though my informants always insisted that this method was never resorted to by their people except in the case of those killed in war.

[b] The store was more than 2 miles south of the channel of the river, but it had been built at the foot of a little rise upon which the present village is located and was within the reach of the flood. This is but one of many instances where the white settlers of Arizona have not profited by the experience

Blackwater. The Pimas went on a campaign against the Apaches with the Papagos, but the parties quarreled and separated. The Pimas killed an Apache woman near Salt river while on their way home.

1869–70

Gila Crossing. A man at Rso'tûk was killed by the accidental discharge of a revolver in the hands of a companion.

Blackwater. An unusually heavy rain occurred during the winter, which gullied the hills deeply.

The Apaches were making tizwin when the soldiers and Pima scouts attacked them; they took the alarm and escaped, leaving the liquor in the hands of the allies.

1870–71

Gila Crossing. The first canal[a] at Tempe was built by the Mormon settlers [1870].

Blackwater. The Apaches had come to the river at Santan for water and some Pimas discovered their trail and set off in pursuit. They failed to inflict any injury upon the enemy and retired with one of their own number mortally wounded.

At this time a Pima was killed at Ta-atûkam by the Apaches. These two corpses were burned.

Another Pima was killed during the year at Tempe by the Apaches, and his body was buried.

1871–72

Gila Crossing. An epidemic of measles prevailed in all the villages during this year. The Indians knew absolutely nothing about treating the disease, and many died.[b]

Salt River. In the winter the Kwahadk's went on the warpath against the Apaches and were accompanied by Na-aputk't'. They tried to surprise the enemy at a tank near Picacho, but found no one there. They followed the trail, however, until they came to a point near the present station of Red Rock, where they sent out scouts in the night, who discovered the whereabouts of the enemy by hearing one of them cough. They surrounded the camp and attacked it at

of the natives, ancient and modern, who have located their homes beyond the reach of the freshets that transform the shallow beds of blistering sand into irresistible torrents that overrun the bottom lands which may have been untouched by flood for many years. "The flood of September, 1868, was perhaps the most destructive ever known, destroying three of the Pima villages and a large amount of property on the lower Gila." Bancroft, XVII, 536.

[a] The main canal is less than 2 miles in length. It has been enlarged several times, so that its capacity is now 325 cubic feet per second, irrigating over 30,000 acres.

[b] The experience of the agency physicians in after years show that the high rate of mortality from this disease has not been due to the lack of acquired immunity, but to the ignorance of the Pimas as to the proper care of patients, and especially those convalescing. The youth who was the only victim at Sacaton in 1899 took a cold water shower bath as soon as he was able to be about and paid the penalty for his rashness.

daylight. The Apaches ran confusedly about without their weapons; fifteen were killed and many guns, bows, and quivers were captured.

Blackwater. At the hill, Kâ'matûk, somewhat detached from the Sacatons on the northeast, a man was bitten by a rattlesnake and died.

At about the same time the Pimas killed an Apache who was known as Vakoa, Canteen, near the Superstition mountains.

1872–73

Gila Crossing, Salt River. For several years the Pimas had had little water to irrigate their fields and were beginning to suffer from actual want when the settlers on Salt river invited them to come to that valley. During this year a large party of Rso'tûk Pimas accepted the invitation and cleared fields along the river bottom south of their present location. Water was plentiful in the Salt and the first year's crop was the best that they had ever known. The motive of the Mormons on the Salt was not wholly disinterested, as they desired the Pimas to act as a buffer against the assaults of the Apaches, who were masters of the country to the north and east.[a]

Salt River. It was during this winter that the United States soldiers and the Pima, Maricopa, and Apache scouts surrounded the Superstition Mountain Apaches at the "Tanks" and rained bullets into their ranks until not a single man remained alive. "It was a sight long to be remembered," said Owl Ear, in narrating the circumstances.[b]

1873–74

Gila Crossing. Ku-ukâmûkam, the Apache chief, and his band were killed by the soldiers and Pima scouts.

Kâmûk Wutcâ Â-âtam, People-under-Kâ'matûk, or the village at Gila Crossing, was settled during this year.[c]

Gila Crossing, Salt River. The telegraph line was run through from west to east during the winter.[d]

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[a] By Executive order of June 14, 1879, the land occupied by the Pimas on Salt river was set apart as the Salt River reservation. It embraces about three townships on the north side of the river about 30 miles north of the original Pima villages. There are several large ruins and at least one large canal upon the reservation that were built by the Hohokam. By an arrangement with the canal companies the Pimas have insured for themselves a constant supply of water, and the Salt River community is regarded as the most prosperous among the Pimas.

[b] This sharp engagement took place on the 28th of December, 1872, in the canyon of the Salt river, south of the Mazatzal mountains. It has been graphically described by Capt. John G. Bourke in his On the Border with Crook, 191-200. He states that 76 Apaches were killed and 18 captured. One wounded man was overlooked and made his escape. "Lead poured in by the bucketful" and an avalanche of bowlders was hurled down hundreds of feet from above upon the enemy.

[c] There is an unfailing supply of water at this place; the Gila, after flowing 75 miles beneath the surface, rises to form a stream large enough to irrigate several hundred acres.

[d] This was a military telegraph built from funds obtained by special appropriations from Congress. Arizona was fairly well provided with telegraph lines by the time the railroad reached Yuma, in 1877, as there were more than 1,000 miles in operation in the Territory.

The Pimas went on a campaign against the Salt River Apaches soon after a heavy rain. When they reached the Salt river it was too high to be safely forded, so they built a raft and tried to take their saddles and blankets across upon it. The raft sank and they lost all their effects. Some of the party who had not engaged in the raft enterprise found a safe ford and continued on their raid, in which they killed several of the enemy, and near Four Peaks captured an Apache lad.[a]

1874–75

Gila Crossing. A man trying to catch his pony approached from the rear so that he could reach its tail, which he probably thought it advisable to lay hold on until he could fasten the rope around the animal's neck. One end of the lariat was attached to his waist, the other he tied to the horse's tail. The animal broke away and dragged him to death.[b]

Blackwater. The Apache White Hat killed a Pima.

1875–76

Gila Crossing. In this year sickness prevailed in the village of Rsânûk, apparently the same as in 1866, when the principal symptom of the disease was shooting pains through the body. Two medicine-men were suspected of having caused the trouble by magic means, and they were killed to stop the plague.

Blackwater. For a short time the Pimas were free from Apache attacks, and they ventured into the mountains to gather mescal. While there, a race took place between a man and a woman, in which the woman won.

Later in the season there was a general gathering of the villages to witness a race with the kicking-ball.

1876–77

Gila Crossing. There was an Apache village called Hâvany Kâs at the junction of the Gila and Salt rivers while a truce existed between the Pimas and Apaches. During this year an epidemic of smallpox prevailed in that village, as well as in all those of the Pimas and Maricopas.

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[a] He afterwards became known as Doctor Montezuma, now a prosperous physician practising in the city of Chicago.

[b] This, the only event of the year in the Gila Crossing record, is unimportant in itself, and yet it illustrates a phase of Pima character that is worthy of notice. In handling horses they exhibit a patient subtlety resembling that of the snake creeping upon its prey, until they have gotten a rope or halter on the animal, when their gentleness disappears. Yet in all their harnessing or saddling they manifest an innate tendency toward carelessness. They always work up on the right instead of the left side of a horse, and they also mount from that side.

In the spring of 1877 the Gila Crossing Pimas and the Gila Maricopa villagers were pitted against each other in a relay race, the first between the two tribes.[a]

Blackwater. While a party was gathering mescal just before the wheat ripened a mare gave birth to twin colts.

1877–78

Gila Crossing, Salt River. During the winter a man who had gone a long distance to search for his horses perished from the cold, and his body was found in a sitting position under a tree.[b]

Gila Crossing. A party of Pimas went to the Kwahadkʿ village to drink tizwin, and in the quarrel which ensued the Casa Blancas killed two men of Santan.

Some time afterwards the Gila Crossing people drank tizwin, and one of their number was killed by a man from Salt River.

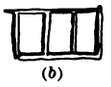
Blackwater. A man of Blackwater who was with a party that went to gather mescal sickened from some unknown cause, and died. The corpse was brought back to the village.

1878–79

Gila Crossing, Salt River, Blackwater. The principal event of the year was the building of the Southern Pacific railroad along the southern border of the Gila River reservation.

(a)

(b)



(b)

Salt River (a), Blackwater (b). A feud that had originated in the quarrel at the Kwahadkʿ village during the preceding year reached an acute stage in February, 1879. The majority of the people of Blackwater and the lower villages, which were then known as Santan, conspired to kill the men of a certain faction during a night determined upon several days in advance. A guard was set at Blackwater, who was to watch their movements without giving them any hint of his purpose. One of those who were preparing for the attack at Blackwater had a brother at Casa Blanca, and he feared that this brother might be included in the list of victims at the lower villages, so he went one night to warn him or to get him to return with him to Blackwater. The next day the brother's conscience began to act, and he finally decided that if these men were killed and he did not warn them he would be answerable for their death. He therefore sent a runner to Blackwater, who told one of the intended victims of the conspiracy formed against them.

[a] Tcĕrĭkûs, one of the Maricopa runners, afterwards won a six-day race in San Francisco and was a close second in a similar endurance race in New York.

[b] The Pimas believe that he froze to death, and if this be true it indicates an unusually low temperature and that one man at least had very slight power of resistance to cold. The lowest temperature recorded at the Phoenix meteorological station for a period of sixteen years is 11° F. Rept. of Chief of Weather Bureau, 1900–1901, I.

The recipient of the news sent one of his family to inform another of his party, and so the news was spread so quietly that the guard scarcely noticed what was going on until the men began slipping one by one into the mesquite thickets. Before he could reach his friends, who were out in the fields, the whole proscribed party had escaped and were on their way toward Santan, where they and their friends attacked their Santan opponents early the next morning.

Juan Thomas, his two brothers, father, and uncle were in the party attacked. The old man, Iïâs, was the bravest, and fought openly with bow and arrows until they succeeded in driving off their assailants. He was slightly wounded with a bullet in the abdomen and an arrow in the arm, but no one was killed. One of the brothers was irrigating his field when a runner came with the news that his family was being killed and that he was in danger also. He ran toward the Double buttes and soon saw another man running in a course parallel to his own. The other saw him, and both began dodging to escape from the two clumps of mesquite behind which they had halted. Then they discovered that they were brothers, and they debated long as to what they should do. It is also said that they shed tears at the peril of their relatives, to whose aid they could not go without weapons. It was also a cause of grief that their fellows should rise against them. They decided to return to the village, but by that time the fight had ended.

Iïâs had come out of his house and chased those who were trying to shoot him. They fired several shots and some arrows at him, but when he came near they ran away. He called his enemies by name, inviting them to come and get satisfaction if they were bent on killing him. When the attacking party withdrew, the Thomas family went to the Double buttes, and on finding that they were not pursued they went to Blackwater, where their story so aroused their friends that an expedition was organized to seek revenge. They secured two boxes of cartridges from the trader at Blackwater and came down the river.

They formed a skirmish line as they approached the lower settlement and met their opponents at the Government school building. The Santan party hastily knocked a few loopholes in the adobe walls and gathered in and around the building, to withstand an attack. The Blackwater men killed three among those outside the schoolhouse and could have killed many more with their superior weapons, but their thirst for revenge seemed to be satisfied with that number, and they did not pursue those who fled across the mesa like frightened rabbits.

1879–80

Gila Crossing. During this winter there was a heavy fall of snow.[a]

Blackwater. At an abandoned store above Casa Blanca, the walls of which are yet standing, a white man was killed by two young men, who were caught before they secured the money of the victim, robbery being the motive for the deed. The one who did the shooting was taken to the county jail at Florence.

1880–81

Gila Crossing. At the beginning of the year a man was bitten and killed by a rattlesnake at Gila Crossing.

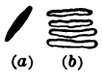
Blackwater. The murderer mentioned in the record of the preceding year was hanged at Florence.

1881–82

Gila Crossing. During a tizwin drunk at Salt River two young men killed each other. The Casa Blanca people went to Gila Crossing to participate in a feast and dance.

Blackwater. The Pima police were sent from Sacaton to arrest some Kwahadk's living at their village about 50 miles south of the agency. Two were killed.[b]

1882–83



Gila Crossing (*a*), *Blackwater* (*b*). An epidemic of measles prevailed among the Pimas and Maricopas, causing the death of many persons.

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[a] An event of such rarity that it is mentioned but twice in these records of seventy years.

[b] The Kwahadk's had been drinking tizwin, and as they had never been interfered with by the agent they were not conscious of having trangressed any laws. Furthermore, drunkenness was the rule among the few whites with whom they came in contact, and it was a privilege that the Kwahadk's indulged in but once or twice a year. Old inhabitants at Sacaton tell me that the agent was working prisoners upon a reservation farm and selling the crop for his own profit. The Pimas had been committing no misdemeanors or crimes that offered any excuse for imprisoning them and the crops needed attention, but nevertheless he ordered his police to bring in the Kwahadk's dead or alive. One of the young Kwahadk's frankly declared his innocence of any intentional transgression and defied the police to take him from his home. He was promptly shot. As the police were returning to Sacaton they were overtaken by the father of the murdered man, who told them that he had nothing to live for, as they had killed his son and they might as well kill him. The police obligingly complied with his request. "Innocent and unoffending men were shot down or bowie-knifed merely for the pleasure of witnessing their death agonies. Men walked the streets and public squares with double-barreled shotguns, and hunted each other as sportsmen hunt for game. In the graveyard of Tucson there were 47 graves of white men in 1860, and of that number two had died natural deaths, all the rest having been murdered in bar-room quarrels." Life Among the Apaches, by John C. Cremony, 117.

1883–84

Gila Crossing. The Salt River Pimas went to a fiesta at Gila Crossing.

Blackwater. A drunken Pima while riding on a box car on the Southern Pacific was run over and killed.[a]

1884–85

Gila Crossing. An epidemic during this year among the Kwahadk's caused the execution of two medicine-men who were suspected of bringing the visitation upon the tribe.[b]

Blackwater. The first wagons issued by the Government to the Blackwater people were received this year.

1885–86

Gila Crossing. Hwela, named for the agent Wheeler, was baptized this year as the first Christian convert among the Pimas.[c]

Two youths were thrown from their horses during a rabbit hunt and killed.[d]

Blackwater. Two prominent men of Blackwater died.

1886–87

Gila Crossing. Tizwin was made at Gila Crossing in such quantities that it was passed around in bowl-shaped baskets. One man was killed.

The first adobe houses were built at Gila Crossing, and their owners were thereby entitled to one wagon each.[e]

A man at Salt River was shot by a white man; the particulars were not known to Kâemâ-â.

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[a] The practice of allowing the Indians to ride free upon freight trains was established when the road was first built and is yet continued. The object of this generosity is said to be the procurement of the good will of the natives, who in return would give warning of washouts, or obstructions intentionally placed on the track and, perhaps, give concessions of rights of way across the reservations in the event of future extensions. Agent Jackson in his report for 1883 stated that six Pimas had been killed that year by falling from trains when drunk.

[b] It will be noticed that such common events as this among the Kwahadk's are recorded by the calendrists, thus showing how closely related the tribe is to the Pimas.

[c] Mr C. H. Cook, a Civil War veteran, had come as a teacher and missionary among the Pimas at the close of the year 1870. A sincere and devout Christian, he labored for nearly fifteen years before the people to whom he has devoted his life began to understand the message that he brought to them. He informs the writer that three or four other men had accepted his teaching before Hwela, but it is probable that this year marks the beginning of the conversion, which thereafter advanced very rapidly. Mr Cook has described his experiences among the Pimas and Apaches in a small volume of 136 pages, entitled, Among the Pimas, 1893. The chapter on "The Pima Indians, their manners and customs," by Rev. Isaac T. Whittemore, is inaccurate and inadequate.

[d] These hunts were frequently made and resulted in the destruction of large numbers of hares and rabbits, two species of the former and one of the latter. They were simply drives by a company of mounted men who surrounded the area to be beaten over and then advanced toward the center, where the animals were shot with arrows or killed with clubs. Such hunts are yet continued.

[e] These wagons were issued to such men as were willing to cut their long hair, build adobe houses of reasonable size, and provide suitable sheds to shelter the wagons from the scorching heat of summer, which is exceedingly severe on vehicles.

Gila Crossing, Salt river. The Maricopa and Phoenix railroad was built during this year, and thus connection was established between the fertile districts of the Salt river and the Southern Pacific railroad.[a]

Salt River. The medicine-man Staups gave a great dance at Santan, which was accompanied by races and other ceremonies which attracted many visitors, among whom were a Yuma and his wife.

Blackwater. Juan Thomas was employed as a scout by the troops who pursued Geronimo during his last flight into Mexico. The eight dots on Juan's stick represent the soldiers whom the Pimas accompanied. The minor leaders of the Apaches had entered the Pima camp thinking that they were friends, and had been captured, except seven who broke away. The commanding officer having ordered a fresh party of Pimas who had come up, to pursue the escaping Apaches, thirty-one Pimas and eight soldiers tracked the Apaches for two months, until they doubled back to the White mountains, where they were captured by the white soldiers before the Pimas overtook them.

1887–88

Gila Crossing, Salt river. Special mention is made by two annalists of the severe earthquake of May 3, 1887.[b] Owl Ear declared that "it was noticed by many of our people, if not by all, who wondered why the earth shook so."

Gila Crossing. The stage station at Gila Crossing, no longer needed after the railroad was built from the Southern Pacific to Phoenix, was moved during this year to Maricopa junction.

The Gila Crossing settlement was prosperous, and the Casa Blanca people went down to dance and share the products of their brothers' industry.

During a tizwin carousal which took place later in the year, two Gila Crossing men killed each other.

It was at this time that "a Mexican (sic) counted the bones of the people."[c]

The Maricopas were all living together at Mo'hatûk mountain when a quarrel arose in which a medicine-man was killed. His friends retaliated by killing a medicine-man of the opposite faction. This resulted in a division of the tribe, some going to the Pima settle-

[a] The road was completed July 2, 1887.

[b] This is known as the "Sonora earthquake." The shocks were so severe in that state as to be destructive to property and human life. At Tombstone, Ariz., the severe shocks lasted ten seconds, and the vibrations continued for a full minute. The earthquake was felt throughout the southern part of the Territory, and many ranchmen firmly believe that the drought of the last few years, which has transformed the grassy mesas into a desert waste, is due to that earthquake. See Goodfellow in Science, New York, Aug. 12, 1887.

[c] This is the Pima view of the somatological investigations of Dr Herman F. C. ten Kate, who measured 312 Pimas, besides many others among the Maricopas, Papagos, Zuñis, etc. His results are briefly summarized in the Journal of American Ethnology and Archæology, III, 119.

ment on Salt river and the remainder going to their present location on the Gila below the crossing.

Salt River. A white man killed an unknown Pima some time after the earthquake for some unknown reason.

1888–89

Gila Crossing. The American settlers at Tempe invited the Salt River Pimas to a feast.

An eclipse of the moon was observed by the Pimas, and as usual was spoken of as the "time when the moon died."[a]

A prosperous season enabled the Salt River people to hold a dance festival.

Tizwin was made at Gila Crossing, but no one was killed in the resulting debauch.

Blackwater. A Papago who knew the bluebird series of songs sang for the Santan people during the festival held by them.

The captain of the native police and the calendrist went to Fort McDowell with three other men to act as scouts for the soldiers stationed there.

During the year an epidemic carried away three prominent men at Blackwater.

1889–90

Gila Crossing. Two tramps killed a man near the Maricopa and Phoenix railroad.

The Salt River people made tizwin, and during the carousal which followed a man was shot and killed. The murderer was sent to Yuma.

The Hi'atam villagers who formerly lived at Akûtcĭny, south of Maricopa station, went to Gila Crossing to join in the dance festival held there.

Salt River. In a tizwin drunk at Salt River Santco was killed. Soon afterwards another general debauch resulted in the death of Hitiraki. These events caused the order prohibiting the Pimas from making tizwin.

Blackwater. The wife of the head chief died.

1890–91

Gila Crossing. During a tizwin drunk at Gila Crossing a man put poison into the liquor of an enemy, who died in great agony after drinking it.

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[a] Notwithstanding the fact that several score of partial and total eclipses of the moon were visible in Pimería during the period covered by these annals, which in that clear atmosphere must have been seen, they are mentioned but twice, and that in recent times. As it is known from American testimony that the Pimas were profoundly impressed by such phenomena, the failure of the annalists to note them can be accounted for only by their aversion to even a mention of supernatural events supposed to be threatening in character.

At the Salt River settlement a Mexican under the influence of whisky killed a Pima, but the Indians "were good enough not to want to kill" the murderer.

Gila Crossing (*a*), *Salt River, Blackwater* (*b*). In the spring of 1891 occurred the last and most disastrous of the Gila floods. The Maricopa and Phoenix Railroad bridge was swept away and the channels of both the Gila and Salt rivers were changed in many places. The destruction of cultivated lands led to the change of the Salt River Pimas from the low bottoms to the mesas.

1891–92

Gila Crossing. A boarding school[a] for Indian children was established at Phoenix.

Two men died at Gila Crossing during the autumn, and it was supposed that they were poisoned by the tizwin which they had been drinking.

In a tizwin drunk on the Salt River reservation a Papago shot a Pima and fled to escape the consequences, leaving his wife at the village.

Blackwater. The chief and one of the headmen at Blackwater died during the year.

1892–93

Gila Crossing. Two friends went to Maricopa and got drunk on whisky. One cut the other's throat; he then went to the villages on the river above Gila Crossing and in maudlin tones said he thought he saw himself striking someone under him.[b]

The schoolhouse was moved out of Phoenix to a point 3 miles north of the city during the summer of this year (1892).

A woman was struck by lightning at Hi'atam, the village above Gila Crossing.

A dance at Salt River occurred in which two men, drunk with whisky, killed each other.

In the spring of 1892 the Gila Crossing chief, Ato'wâkäm, died.

The Government issued barbed wire for fencing at Gila Crossing, and directed the people to make a road across the fields, which should be fenced to form a lane.

Blackwater. A woman was gored to death at Blackwater by a cow.

The chief, who had been bitten some years before by a rattlesnake but had recovered, died in the spring of 1893.

[a] It was opened in a leased hotel building in September, 1891. Owing to lack of facilities only boys, to the number of 42, were admitted.

[b] The passion for distilled liquor had arisen within the last quarter of a century. Lieutenant Emory wrote, in November, 1846, "Aguardiente (brandy) is known among their chief men only, and the abuse of this and the vices which it entails are yet unknown."

1893–94

Gila Crossing. The village of Hi'atam and the Gila Maricopas had a dance together, but no one was killed.

Tizwin was made secretly at Gila Crossing, but no fatalities occurred.

The "prettiest woman in the village" died at Gila Crossing, and her husband was suspected of having caused her death.

A man was shot by another, who was drunk with whisky.

Blackwater. This year the first horse race ever held by the Pimas took place at Blackwater.[a]

1894–95

Gila Crossing. The Gila Crossing Presbyterian Church was built at the beginning of the year—that is, during the summer of 1894. It was dedicated in December of that year.[b]

A woman was found dead on the Phoenix road. It is supposed that she had been killed by a Maricopa or a Chinaman.

The Gila Crossing people held a dance festival.

The Santa Fé railway reached Phoenix.

There was an eclipse of the moon during this year.

Blackwater. The chief at Gila Crossing favored tizwin drinking and resisted the progress that was beginning to manifest itself. He died in jail at Sacaton.

In a horse race between animals owned by the Sacaton flats and Blackwater villages, that of the former won.

1895–96

Gila Crossing. The Maricopas living on the Gila came to Gila Crossing to attend a dance festival.

Kâemâ-â was elected a chief at the Gila Crossing village. The line is drawn "crooked because I was crooked in my mind whether or not I should accept the responsibility."

Salt River. Two brothers-in-law got drunk together and in the quarrel that ensued one was seriously injured.

Soon afterwards Juan made some wine and invited a number of his friends to come and drink with him. All became drunk and Luigi killed a man whose name was not known to the calendrist. Luigi was sent to the Territorial prison at Yuma, where he died a year later.

[a] However, this sport has not become popular among them, partly owing to their poverty, which prevents them from feeding a horse well enough to enable it to run and from accumulating property with which to bet on the race, and perhaps partly owing to the growing influence of the church party in the community.

[b] This church was established by the veteran missionary, Mr C. H. Cook, who successfully awakened an interest in Christianity among the Gila Crossing villages and had a number of converts at the time when it was considered that, owing to its isolation, the settlement should have a resident missionary.

Blackwater. Two Christians died in this year, one at Blackwater and the other at the Cottonwoods.[a]

During this year a Blackwater youth at the Phoenix school committed suicide by shooting himself.

Gila Crossing. The Kwahadk'ṣ indulged in a tizwin drunk in which one man was killed.

Gila Crossing, Salt River. The Gila Crossing chief fell dead in the prisoner's chair when on trial at Sacaton for selling whisky.

1896–97

Gila Crossing. An epidemic of smallpox prevailed and the whites established a quarantine which the calendrist interprets as, "the Pimas were ordered to stay at home."

Blackwater. Square indicates the Gila Crossing church.

Salt River. The Maricopa and Phoenix railroad was extended from Tempe to Mesa [a distance of about 8 miles] during this year.

1897–98

Gila Crossing. At the beginning of this year the Gila Crossing Catholic and the Casa Blanca Presbyterian churches were being built.

A Papago chief was killed at Maricopa by a companion who was drunk with whisky.

The Rsânikam people went to Akûtcĭny to dance and run a relay race.

In various ways the Spanish-American war was brought to the notice of the Pimas and Kâemâ-â made a record of the event by the sign which might be supposed to be a bush or a yucca plant.

Blackwater. Juan's brother "and another man" died.

1898–99

Gila Crossing. Many children died this year of measles at the Phoenix Indian boarding school.[b]

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[a] Professing Christians among the Pimas were not so rare at this time that the death of two need have been recorded. This was the time when the long labors of the missionary were beginning to take effect and the converts numbered hundreds each year.

[b] The disease also prevailed at Sacaton. Nearly all the children in the school, about two hundred, were sick, but the indefatigable efforts of the agency physician saved all but one, who disobeyed his orders.

There was a heavy fall of snow that could be rolled into great balls as it was melting.

Blackwater. There was no crop this year.[a]

1899–1900

Gila Crossing. During the summer of 1899 a Catholic mission school was established at Gila Crossing.

A Papago was killed by lightning at Gila Crossing.

Barbed wire was issued from the agency at Sacaton.[b]

The Indian Department established a day school at Gila Crossing at this time.

Victor Jackson was struck by lightning as he was returning to Sacaton on the stage road from Casa Grande.[c]

Blackwater. A woman at Blackwater was fatally bitten by a rattlesnake.[d]

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[a] The water of the Gila had been so far utilized by white settlers above the reservation, for the most part more than a hundred miles above, that there was none left for the Pimas. It is difficult to obtain accurate information at this time of the number who perished either directly or indirectly by starvation. During this and the following year five persons are known to have died from this cause, and it is probable that there were others. Most of the Pimas will not beg, however desperate their need may be, so that not all cases were reported.

In one case a wood chopper tried during the hot season to cut mesquite for sale, but he was too weak to withstand the heat and the exertion and was found dead in the chaparral. An old couple were found dead in their house with no food of any kind in their storehouse, and it is supposed that they preferred to starve rather than beg. A man riding to Salt River was too weak from hunger to keep his saddle and fell and perished.

[b] The agent wisely stipulated that if they received free wire they must leave a lane for a road through the fields. The width was not prescribed and they made the lane so narrow that two teams can scarcely pass each other in it, and it becomes churned into mud when the adjoining land is flooded for purposes of irrigation. The Pimas have not manifested any striking road-building instinct that would lead an enthusiastic admirer to relate them to the Aztecs or Incas. Year after year they plodded through the slough between the agency and the river without making an effort to put in a bridge or filling. When one of the Government employees was building a bridge for them several passing teamsters preferred risking their teams and wagons in the sea of mud to assisting for a few minutes to put the bridge in place.

The soil of the reservation is well adapted for road making, and a little care would make the thoroughfares as hard and smooth as those to be found anywhere. However, those upon the tillable lands of river silt readily cut into light dust that rises in clouds when disturbed. In a few places this condition has been remedied by resorting to the temporary and shiftless expedient of the white settlers, who cover the road with straw or corral refuse. The mesa roads, which include all those leading any distance from the Gila, pass alternately over loose soil containing coarse sand that gradually accumulates in the ruts and renders the road "heavy," and over "adobe" soil which is hard and firm in dry seasons, and which makes an ideal roadbed. Hill roads are unknown and there are very few traveling sand dunes to be crossed near the reservation.

[c] His horse was killed and its bones are certain to be pointed out to the stage traveler by the loquacious driver, John McCoy.

[d] It may be presumed that such occurrences are rare or they would not be deemed worthy of record. This woman had gone far out on the desert to search for mesquite beans, as she was without food; indeed the whole community was starving because of the failure of the crops owing to the lack of water in the river for their ditches. Rattlesnakes sometimes make their way into the houses and bite the occupants. Repeated inquiries failed to elicit information that would indicate that any remedies were used for snake bites. A common weed (golondrina?) is called snakeweed by a few whites, and is supposed to be used as a remedy by the Pimas, but I have not yet found a native who ever heard of its being so used.

1900–1901

Gila Crossing. It was during this year that the President came to Phoenix.[a]

Gila Crossing, Salt River. During the spring the man employed to carry the mail between Phoenix and Scottsdale became insane and shot a white man and a Pima youth whom he met on the road near the latter place.

1901–2

Gila Crossing. In September, 1901, the day school was started at Masâ'kimûlt, the Gila Maricopa village.

TECHNOLOGY

The Food Supply

The Pimas subsist upon a mixed diet in which vegetable food predominates. In the past it would seem probable that the proportion of meat was greater than at present, though they have long been tillers of the soil. Certain articles of their diet appear to be markedly flesh producing, and this tendency is at least not diminished by the habits of life resulting from the semitropical climate of the Gila valley. They are noticeably heavier than individuals belonging to the tribes on the Colorado plateau to the north and northeast, and many old persons exhibit a degree of obesity that is in striking contrast with the "tall and sinewy" Indian conventionalized in popular thought. (Fig. 2.)

About every fifth year in primitive times the Gila river failed in midwinter, the flow diminishing day by day until at length the last drop of water that could not gain shelter beneath the sands was licked up by the ever-thirsty sun. The fish gathered in the few pools that were maintained by the underflow, the ducks and other water birds took flight, but the deer and antelope could the more readily be stalked because of their resorting to known watering places. Without water in the river and canals there could be no crops, and necessity drove the people to seek far afield for the native plants that in some degree produce fruits or seeds even in dry seasons. The fruit of the saguaro and the seed or bean of the mesquite were the most abundant and accessible resources. When even these failed the Pimas were driven to make long journeys into the Apache country—

[a] The visit of President McKinley to Phoenix, in May, 1901, made a profound impression upon the Pimas. Kâemâ-â lives but 20 miles south of the Arizona capital, and was present at the time of the President's visit. He made no mark upon the calendar stick to commemorate the event, but related the circumstances as a part of the history.

It is not surprising that the Pimas, who had heard for many years of the Great Chiefs in Washington, should be desirous of seeing one in the flesh when the opportunity presented itself. The official interpreter at the agency frequently, during the winter of 1901-2, expressed her desire to obtain a good biography of the late President. After commenting upon the hideous crime of the assassin at Buffalo she made the truthful and suggestive remark that "no Pima would do such a thing; he would never kill his chief."

and whenever they got a mile from their own villages they were in the land of the Apache—in search of animal food, roots, berries, and especially the edible agaves.

At other times the very abundance of water proved disastrous;

FIG. 2. Fat Louisa.

floods destroyed the canals and swept away the crops. As early as 1697 Padre Kino reported that owing to the fields having been overflowed the Pimas could offer him no pinole,[a] but gave mesquite meal instead.[b] The resort to uncultivated products such as their Papago

[a] Manuscript, Hemenway Collection, x, p. 6, copy by Bandelier from Doc. His. Mex.

[b] Made by grinding parched corn into meal and mixing it with water to form a thin gruel; wheat is now similarly treated. Pfefferkorn gives the following appreciative description of pinole in his Beschreibung der Landschaft Sonora, the second volume of which was published in 1795: "Auch auf dem Felde, und auf der Reise, wo keine Bequemlichkeit zum Kochen ist, haben die Sonorer ihre Nahrung von dem *Mais*. Sie nehmen den nöthigen Vorrath mit: dieser bestehet in dem *Pinole*, den ihnen die Weiber auf folgende Art bereiten. Nachdem der *Mais* im Wasser etwas geweicht, und hernach getrocknet ist; rösten sie denselben in einer irdenen Schüssel, und rühren ihn beständig herum, damit er nicht anbrenne. Währendem Rösten, springen die Körner auf; und das Mark bricht, gleich einer schneeweissen Blume, hervor. Dieses wird *Esquita* genant und ist nicht unangenehm zu essen. Der auf diese Art geröstete *Mais* wird auf dem *Metate* gemahlen; und bekömmt alsdann den Namen *Pinole*. Diese Feld und Reisekost führt der Sonorer in dem Balge von einer wilden Katze, oder einem andern Thiere, mit sich. Sogar die Soldaten, und andere Spanier, haben auf der Reise keine andere Nahrung. Wenn sie essen wollen; so werfen sie zwei oder drei handvoll *Pinole* in eine *Corita*, welche ihnen zu dem Ende allezeit zur Seite hängt; schütten Wasser dazu, rühren beides durcheinander; und nehmen also aus einem Geschiere, zur selbigen Zeit, Speise und Trank. So sehr der *Pinole* von den Amerikanern geschätzet wird; so wenigen Beifall findet sein Geschmack bei dem Europäer; nur Zimmet, und Zucker, können ihm denselben angenehm machen." (Vol. II, p. 132.)

cousins to the southward wholly subsisted upon did not prevent the Pimas from attaining proficiency in agriculture, as will be seen later, and it must many times have preserved them from total extinction. With what success they sought for edible plants may be judged from the subjoined list, which is believed to be fairly complete. It contains 22 plants of which the stems, leaves, or flowers were eaten, 4 that furnished roots or bulbs, 24 with seeds or nuts, and 15 that supplied fruits or berries. And this in a region that appears to the casual visitor to be a desert with but a few thorny shrubs and but one tree that he would deem worthy of the name.

PREPARATION OF FOOD

Very few articles of Pima diet are eaten raw, and many of them are of such a nature as to necessitate thorough cooking; thus the agave and the fruit of some of the cacti are baked for many hours. It may be well, therefore, to describe the methods, so far as they could be ascertained, of preparing the various plants for use. The art of cooking is not well developed among these people; no such elaborate preparations as Mr Cushing found at Zuñi tempt the Pima palate.

In the olden time maize was ground upon the flat metates and formed into loaves, which must have been "sad" indeed, to judge from their modern counterparts. With the advent of the whites came the introduction of a new and quickly accepted cereal, wheat; and the bread made from it also, without leavening agent, is heavy and indigestible. One loaf was obtained (pl. VI, *a*), said to be a comparatively small one, that weighed 14 pounds and yet was only 3 inches thick and 20 inches in diameter. No knowledge of the pueblo wafer breads exists among the Pimas, who confine their treatment of mesquite, corn, wheat, and other flour to baking as tortillas or as loaves in the ashes, frying in suet, or boiling, either in water to form a gruel or mush, or with other foods in the shape of dumplings.

A large part of the cereal food of the Pimas is parched before it is ground.

The process of parching on, or rather among, the coals is dexterously carried out. The coals are raked into the parching pan (pl. XIX, *a*) and after the grain has been thrown upon them it is given a series of tosses with a quarter-turn to each which redistributes the light but bulky coals and the heavier grain. A frequent puff of breath carries away the quickly gathering flakes of ashes. The contents of the pan are separated by a few short jerks that carry the coals in a mass to the edge of the dish, whence the larger particles are scraped off and the smaller blown out. Another method of parching seeds is to place over the fire an olla that has been broken so that at least one side is wanting, thus admitting the hand to stir the contents as they are browned.

Meat is roasted on the coals, a favorite method of cooking dried meat or that of small rodents, or it is boiled until well done. In the latter method, according to one informant, it is put on the fire in cold water. The broth is then thrown away lest it cause consumption. A coarse-grained flour is sometimes boiled with the meat to make what a Canadian voyageur would term rubabu.

Occasionally a housewife will be met with among the Pimas who is scrupulously neat and clean in cooking and in the care of the home. Most of the women, however, carry traces of dried dough on their fingers from week's end to week's end, and the cooking vessels know no cleansing except the scraping that seeks the last particle of food that may cling to them, the rasping tongue of the starving dog, or the hasty slopping of a little cold water into them just before using again. The evil effects of slovenliness are reduced, however, by the peculiar conditions, such as the dry air, which saps the moisture from all organic matter, even in the shade; the outdoor cooking place exposed to a sun that withers all germs; and the habit of eating all the food prepared for each meal, which includes the rule of etiquette prescribing that one must eat all that is set before him.

The kitchen is an arrow-bush inclosure, about 4 or 5 meters in diameter (pl. VI, *b*), containing its set of half a dozen pottery vessels. In the center are the three stones on which the cooking pot rests. Such an inclosure is quite common at the present day, though many have adoped the oval fireplaces of adobe (pl. VI, *c*), some obtain iron kettle stands from the agency blacksmith, and a few (chiefly those who live in adobe houses) are using modern stoves.

PLANTS USED FOR FOOD

Â'nûk i'avak, Atriplex bracteosa var.; A. coronata Wats.; A. elegans Dietrich. These saltbushes, with a few others as yet unidentified, are sometimes boiled with other food because of their salty flavor. They are cooked in pits with the fruit of the cactus, Opuntia arborescens, the method of roasting them being described below. The young shoots of some of them are crisp and tender. Commonly known as "sagebrush," these saltbushes are among the most abundant plants in that region. There are both herbaceous and woody species, the former being eaten by stock and the latter being useful for fuel.

A'opa hi'âsĭk, Populus deltoides Marsh. The cottonwood occurs in a thin fringe, with here and there a grove along the Gila and Salt rivers. In February and March the women send some of the barefoot boys into the tree tops to throw down the catkins, which are then gathered in baskets and carried home to be eaten raw by stripping them off the stem between the teeth.

Aot, Agave americana Linn. (possibly a few related species also). Mescal was gathered in times of famine, and it would have been much more extensively used had it not been for the danger from "the enemy," the Apaches, that attended even the shortest journey away from the villages. The plant has ever been a favorite, not only among the Pimas but also with the Papagos, the Apaches, and a score of other tribes. The first day's work after reaching the hills where this plant grows was to seek suitable wood and make digging sticks. Then the men gathered the mescal heads by prying them out with the sticks, and trimmed off the leaves with a knife, leaving one or two, so that the heads might be tied in pairs and slung on a rope for carrying. Thin-leaved specimens were rejected, inasmuch as they not only contain little nourishment, but blister the mouth when eaten. While the men were bringing in the mescal, the women gathered wood for fuel. Pits were dug, and after the fire built in them had died down small stones were placed on the coals. The mescal was then placed on the stones and the whole covered with earth. When it had roasted for twenty-four hours, a small opening was made in the pit and its contents examined; if the cooking was not yet complete, the opening was closed and the pit left undisturbed twelve hours longer. If the roasting was not done when the pit was first opened, it was believed that the incontinence of some members of the party was the cause. The heads of the fruit were opened by removing the envelope on one side; the center was cut out and dried in the sun, when it was ready for use or for storing away.

Mescal is now obtained from the Papagos. It is eaten by chewing until the juice is extracted and rejecting the fiber. It is used alone or together with pinole. Sirup is extracted from the prepared mescal by boiling until the juice is removed, which is then thickened by prolonged boiling until it becomes a black sirup, somewhat similar to sorghum. It is inferior to saguaro sirup.

Â'păn, Monolepis chenopoides. The roots are washed, boiled in an olla, and cooled in a basket. The water is squeezed out, and they are again put into the olla with a little fat or lard and salt. After cooking for a few moments they are ready to serve with tortillas. This plant is also used in a similar manner by the Mexicans, who are supposed to have learned its value from the natives. The seeds are boiled, partially dried, parched, ground on the metate, and eaten as pinole.

A'taftak, Cucurbita fœtidissima H. B. K. The seeds of this wild gourd are roasted and eaten.

E'ikâf'ĭ. The root of this small plant is gathered, boiled, and eaten without peeling.

Hait'kam, Olneya tesota. The nuts of the ironwood tree (pl. VII, *a*) are parched in an olla, or, what is more usual, the broken half of one,

and eaten without further preparation. The tree grows on the mesas on all sides of the villages, where it is very conspicuous for a few days in May, when it is covered with a mass of purple flowers.

Hâ'kowat, Phoradendron californicum. The berries of the mistletoe that grows on the mesquite are gathered and boiled without stripping from the stem. They are taken in the fingers, and the berries stripped off into the mouth as eaten. Various species of mistletoe are very abundant on the trees along the Gila, but this one only is eaten.

Halt, Cucurbita pepo Linn. The common species of pumpkin grown by the Pimas, as well as by the whites and Mexicans, is cut in strips and dried, when it is known by a number of different names, according to the manner of cutting and the particular variety. This species includes the pumpkins proper, the bush scallop squashes, the summer crook-necks, and the white or yellow warty squashes. The club-shaped, pear-shaped, or long-cylindrical smooth squash is Cucurbita moschata Duchesne. It is extensively grown by the Pimas. The seeds of the pumpkin are parched and eaten. When the dried pumpkin is used, it is softened in water and boiled.

Ha'nûm, Opuntia arborescens. The fruit of this cactus (pl. VIII, *a*) is gathered with an instrument that resembles an enlarged wooden clothespin. It is collected in large quantities and carried home in the kiâhâ, or carrying basket. A pit is dug and a fire built in it, on which stones are heated. As the fire dies down the stones are removed and a layer of the saltbush, Suæda arborescens, is placed over the coals; above this is placed a layer of cactus fruit, then hot stones, and so alternately to the top, over which a thick layer of saltbush is laid with earth outside. The pit is left undisturbed over one night, then its contents are spread out, dried, and the fruit stirred with a stick until the thorns are rubbed off, whereupon it is ready to store away for future use. In its final preparation it must be boiled. It is then salted and eaten with pinole. The acid flavor is usually relieved by the addition of various plants cooked as greens.

Ha'rsany, Cereus giganteus Engelm. The fruit of the giant cactus, or, as it is more generally known in the Southwest, the saguaro (pls. VIII, *b*, and IX, *c*, *d*), is gathered in June, and so important is the harvest that the event marks the beginning of the new year in the Pima calendar. The supply is a large one and only industry is required to make it available throughout the entire year, as both the seeds and the dried fruit may be preserved. Seeds that have passed through the body are sometimes gathered from the dried feces, washed, and treated as those obtained directly from the fruit, though there would seem to be some special value ascribed to them as in the case of the "second harvest" of the Seri.[a]

[a] Cf. W J McGee in Seventeenth Annual Report of Bureau of American Ethnology, 212.

The fruit is eaten without preparation when it ripens. It is of a crimson color and contains many black seeds about the size of those of the fig, which fruit it resembles in taste. By a process of boiling and fermentation an intoxicating liquor is obtained from the fresh fruit which has been more highly esteemed than the nutritious food and has rendered this new-year a season of debauchery.[a]

The fruit is dried and preserved in balls 15 or more centimeters in diameter (fig. 3). From either the fresh or dried fruit sirup is extracted by boiling it "all day." The residue is ground on the metate into an oily paste which is eaten without further preparation. The seeds may be separated from the pulp at the time of drying the fruit and may be eaten raw or ground on the metate and treated as any meal—put into water to form a pinole or combined with other meal to bake into bread.

Ha'valt, Yucca bacatta. The fruit is boiled, dried, ground on the mealing-stone, and boiled with flour. It is also eaten raw as a cathartic. The stems are reduced to pulp and used as soap. Y. elata is also used as soap.

Ho'ny, Zea Mays. Corn, the most important crop of the Pueblo tribes, has, in recent years at least, been of less value to the Pimas than wheat. The numerous varieties are all prepared in about the same manner. As the husked corn is brought in by the women, it is piled on a thin layer of brush and roasted by burning the latter, after which it is cut from the cob, dried, and stored away for future use.

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[a] "I arrived at the Pimas Gileños, accompanied by the governor of the Coco-Maricopas. There was great rejoicement, for there had spread thus far the report that they (the Moquis) had me killed. The governor of the Pimas told me that all the relatives were well content, and wishing to make a feast, all the pueblos together. I agreed to this, but on condition that it should be apart from me, foreseeing in this what would come to pass. In a little while I heard that they were singing 'a heap' (*de monton*); this was stopped presently, but was followed by a great uproar of discordant voices, and shouting, in which they said, 'We are good! We are happy! We know God! We are the fellows to fight the Apaches! We are glad the old man (as they call me) has come, and not been killed!' This extravagant shouting (*exorbitante griteria*), a thing foreign to the seriousness of the Pimas, I knew came from drinking, which produced various effects. Some came and took me by the hand, saluting me. One said, 'I am padre de Pedro.' Another said to me, 'Thou hast to baptize a child.' Another, 'This is thy home—betake not thyself to see the king, nor to Tucson.' Others made the sign of the cross, partly in Spanish, so that though I felt very angry at such general drunkenness, there did not fail me some gusto to hear the good expressions into which they burst, even when deprived of reason. The next day I complained of these excesses to the governor, who told me that it only happened a few times and in the season of saguaro, and adding that it made his people vomit yellow and kept them in good health. What most pleased me was to see that no woman got drunk; instead of which saw many of them leading by the bridle the horse upon which her husband was mounted, gathering up at the same time the clothes and beads that the men scattered about, in order that none should be lost." (Garcés's Diary, 438.) "The three pitahaya months," says Father Salva-Tierra [describing the saguaro harvest in California], "resemble the carnival in some parts of Europe, when the men are in a great measure stupified or mad. The natives here also throw aside what reason they have, giving themselves up to feastings, dancings, entertainments of the neighboring rancherias, buffooneries, and comedies, such as they are; and in these, whole nights are spent to the high diversion of the audience. The actors are selected for their talent of imitation: and they execute their parts admirably well." (Venegas, History of California, I, 82.) "The gathering of this fruit may be considered as the harvest of the native inhabitants. They can eat as much of it as they please, and with some this food agrees so well that they become corpulent during that period, and for this reason I was sometimes unable to recognize at first sight individuals otherwise perfectly familiar to me, who visited me after having fed three or four weeks on these pitahayas." (Jacob Baegert, The Aboriginal Inhabitants of the Californian Peninsula, in Smithsonian Report, 1863, 363.)

The shelled corn is ground on the metate and baked in large cakes in the ashes. Corn is also boiled with ashes, dried, and the hulls washed off, then thoroughly dried and parched with coals or over the fire. It is then made into a gruel, but is not so highly regarded as the wheat pinole.

I'savĭk. The thorns of this cactus are removed as soon as gathered, and it is eaten without further preparation.

I'tany, Atriplex sp. The heads of this saltbush are pounded up in the mortar and screened to separate the hulls. The seeds are washed, spread to dry, parched in a piece of olla, and ground on the metate. They are then ready to be eaten as pinole, or dry, in the

FIG. 3. Dried saguaro fruit.

latter case a pinch of the meal being taken alternately with a sip of water.

Ka'ĭfsa, Cicer arietinum Linn. The chick-pea is raised in small quantities and is also purchased from the traders. This is the garabanzo of Mexico. The name chicos is sometimes applied to this pea as it is to anything small, especially to small or, rather, sweet corn that is just old enough for roasting.

Kâf, Chenopodium murale. The seed is gathered early in the summer and prepared by parching and grinding, after which it may be eaten as pinole or combined with other meal.

Kâ'meûvat. After the August rains this seed is gathered, parched over coals in the parching pan, ground on the metate, and eaten as pinole.

Kan'yo, Sorghum vulgare Pers. Sorghum is cultivated when the water supply permits. It has been obtained recently from the whites, who raise it extensively in the Southwest.

Ki'ak. The heads of this annual are gathered and the seeds beaten out with the kiâhâ stick used as a flail. The seeds are moistened, parched, which makes it resemble pop corn, ground on the metate, and eaten by taking alternately pinches of meal and sips of water.

Koĭ, Prosopis velutina. Mesquite beans[a] formed nearly if not quite the most important article of diet of the Pimas in primitive times (pl. x, *a*). They are still extensively used, though the supply is somewhat curtailed by the live stock which feed avidly upon them. As already stated, the crop sometimes fails, "especially in

FIG. 4. Sheds with caches on roofs.

hard times," as one of our informants naively remarked. The mesquite harvest takes place somewhat later than that of the saguaro. The beans are gathered and stored in the pod in cylindrical bins on the roofs of the houses or sheds (fig. 4). While yet on the trees, the bean pods are bored by larvæ of the family Bruchidæ.[b]

[a] Analysis of mesquite beans, including the pod:

	Per cent.		Per cent.
Moisture	5.96	Crude cellulose	32.53
Dry matter	94.04	Albuminoids	14.03
Crude ash	5.20	Nitrogen-free extract	37.13
Crude fat	5.12	Nutritive ratio	1:5.8

"The amount of cellulose, or woody fiber, is very much larger in the bean, and the amount of nitrogen-free extract considerably smaller; but the albuminoids and fats compare very well indeed. The bean pod is 4 to 8 inches in length, and grows in bunches from six to eight pods to the bunch." Third Annual Report, 1888, Texas Agricultural Experiment Station. Reference kindly supplied by Mr Ewell, Bureau of Chemistry, Department of Agriculture.

[b] "There are two species of Bruchus which are especially common in mesquite seeds in Arizona—both the common mesquite and the screw bean, namely, Bruchus prosopis Lec. and Bruchus desertorum Lec. Occasionally other species breed in the seeds." Dr L. O. Howard, Department of Agriculture, letter.

The beans are prepared for use by being pounded up in a mortar with a stone pestle, or, if a large quantity is required, with a large wooden one. The pods may be ground with the beans. Another method of preparation is to separate the beans from the pods, parch them by tossing them up in a pan of live coals, and reduce them to meal by grinding, whereupon they may be eaten as pinole. This has a sweetish taste and is reputed to be very nourishing.

The catkins of the mesquite are eaten without preparation by stripping from the stem between the teeth.

The white gum which exudes from the mesquite limbs is used in making candy.

The inner bark is employed as a substitute for rennet.

Ko'kitcvhûtaki, Parkinsonia microphylla (in the foothills); P. torreyana (on the mesas) (pl. x, *b*). The paloverde bean was formerly eaten either as gathered or after being pounded in the mortar. It was not eaten as pinole, but was sometimes mixed with mesquite meal.

Ko'mûlt. The heads are gathered and washed, sometimes twice, then boiled in an olla with a little water. Wheat flour and a seasoning of salt are added and the whole is stirred until the heads fall to pieces.

Ko'-okupaltûk. According to tradition the seeds were eaten in primitive times, but no one now knows how they were prepared. The plant is now boiled with meat as greens.

Ko'ûtcûlt, Prosopis pubescens. Screw beans are abundant along the banks of the Gila. They are cooked in pits which are lined with arrow bushes set on end. The beans are placed in layers alternating with cocklebur leaves, the whole covered with earth and left to stand three or four days, after which they are taken out and spread to dry. They are then ready to use or store away in the arrow-bush basket bins on the house tops. They are further prepared for food by pounding up in a mortar, the fine flour then being ready to be eaten as pinole. The coarser portion is taken up in the hands with water, the juice sucked through the fingers, and the remainder rejected.

Kwa'aolt, Licium fremontii var. The red berry is boiled and eaten.

Mâ-âtatûk. This is described as resembling asparagus. The stems may be eaten raw or boiled or roasted in the ashes.

Me'la, Citrullus vulgaris Shrad. Watermelons are among the most important crops of the Pimas and are eaten during at least six months of the year.

Naf', Opuntia engelmanni. The thorns are brushed off the fruit of the prickly pear before it is gathered. It is then peeled and eaten, the seeds being thrown away. The Papagos make a sirup from the fruit (which is said to cause fever in those not accustomed to its use)

and dry the fruit as they do that of the saguaro, but the Pimas make no further use of it than to eat it raw.

Nyi'âtam, Malva sp. This plant is boiled and the liquid used in making pinole in times of famine.

O'-opat, Acacia greggii. The beans of the cat's-claw (pl. VII, *b*) were eaten in primitive times, but no one of the present generation knows how they were prepared.

Ositcu'wutpat, Zizyphus lycioides. The black berry of this thorny bush is gathered in the basket bowls after it has been beaten down with sticks. It is eaten raw and the seeds are thrown away.

Pap'kam. The heads are tied in bunches and dried in the sun. They are then shelled, screened, the seeds parched, ground on the metate, and eaten as pinole. They are "not sweet."

Pavf(ĭ), Phaseolus vulgaris Linn. At least one variety of the common kidney bean, pole bean, bunch bean, etc., was known to the natives before the advent of the Spaniards. Venegas states[a] that "red frixoles, or kidney beans" [Phaseolus sp.], were cultivated by the natives of lower California, and this may have been the variety known in Pimería.[b]

Pel'tûkany, Triticum sativum Lam. Wheat is the principal crop of the Pimas, and four varieties are known to them. It is ground on the metate to make the flour used in cooking the great loaves that weigh from 10 to 20 pounds. Tortillas resembling those of the Mexicans are now more commonly used than the heavy loaves of former days. A light and toothsome doughnut is fried in bubbling hot suet (pl. VI, *a*). One of the commonest methods of preparing wheat is to parch it, grind it on the metate, and eat it as a sort of thin gruel called hak(ĭ) tcoĭ; or the wheat may be boiled before parching, in which case the product is known as pârsâ[tcoĭ. Both are known to the whites by the Mexican term "pinole."

Rsat. The bulb of the wild onion is eaten. It is common on the slopes at the foot of the Estrellas.

Rso'-ouwût. The fine reddish seed is boiled with flour as a mush.

Rsu'su-ulŭk. This is used as greens with similar plants.

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[a] History of California, 45.

[b] The entire region occupied by tribes of the Piman stock, extending over the larger part of Sonora as far northward as the Rio Gila, was known to the Spanish as Pimería. That portion between the Yaquis and the Gila was called Pimería Alta. The Papagos occupy nearly all this territory, and of late it is commonly called Papagueria. For an undetermined number of centuries the Pimas proper have occupied the middle Gila district. Their habitat differs, therefore, from that of the other tribes of the stock, and for convenience their territory will be here designated by the term Pimería.

Buschmann states in Die Pima-Sprache that "Duflot de Mofras (*exploration du territoire de l'Orégon, des Californies et de la mer vermeille* T. I., Par. 1844, p. 208) setzt die *Pimeria alta* von den Flüssen Colorado und Gila an bis zur Stadt *Hermosillo* und zum *rio de los Ures;* die *Pimeria baxa* von da an bis zum *rio del Fuerte*, welcher die Gränze von Sonora und Cinaloa bildet. Er setzt beide, zu grosse *Pimerias* gleich Ober- und Nieder-Sonora: '*La Sonore se divise en haute et basse, et prend aussi, à cause des Indiens Pimas, le nom de* Pimería alta y baja.' Arricivita (p. 396) bestimmt die *Pimeria alta* so: 'Die ganze *Pimeria alta* dehnt sich aus vom *Presidio de Ternate* bis zu den *playas de Caborca*, über 100 *leguas;* und von der Mission *S. Ignacio* von S nach N bis zum *Gila*-Flusse, wieder 100 *leguas;* ihr grösster Theil liegt unter dem 30ten Breitengrade. *Toda la Pimeria* (397) *está habitada de Indios.*' " P. 321, 322.

Sâi'tûkam iavik. The leaf of this thorny plant is eaten raw or boiled.

Si'etcu, Cucumis melo Linn. The muskmelon is extensively raised by the Pimas.

Si'vitcĭlt, Rumex hymenosepalus. The canaigre is cultivated by the whites in the Gila valley for tannin, yet it is eaten by the Pimas. The stem is roasted in the ashes or, recently, stewed with sugar. We have seen the children greedily devouring the raw roots in March. Doctor Palmer states that the roots are used to tan deerskin and also as soap.

So'-oaot, Sophia pinnata (Walt) Britton. The seeds are parched, ground, and mixed with water to form pinole. The Mexicans of Arizona use the leaves of this plant in preparing a drink. An infusion made from the leaves is also employed as a remedy for sores.

Tâki, Gosypium sp. The cotton plant is no longer raised, but from pre-Spanish days down to the last quarter of a century it was cultivated both for the fiber and the seeds. The latter were pounded up with mesquite beans in the mortar or they were sometimes parched and eaten without grinding.[a]

Tapk'. These seeds resemble those of flax in appearance. They are eaten either raw or boiled and are yet extensively used.

Tapkalt. This is one of the varieties of squash that is cultivated by the Pimas at the present time.

Tâ'ta â'nûk, Atriplex nuttallii. The stems of this saltbush are boiled with wheat. They are cut in short lengths and used sometimes as a stuffing for roast rabbit.

Tcia, Salvia columbaria Benth. The seeds when infused in water form a pleasant mucilaginous beverage, very popular with the Pimas.

Tci'âldi. The fruit of this cactus is brought by the Papagos and traded to the Pimas. It is cooked in the same manner as Opuntia arborescens.

Tciaaolt, Echinocactus wislizeni. The pulp of the visnaga is considered valuable in lieu of water to those suffering from thirst. It is also eaten after being cut in strips and boiled all day. It is sometimes boiled with mesquite beans, a layer each in the cooking olla. It is occasionally boiled with sugar. It is quite a popular confection among the whites, who, in some places, obtain the raw material from the Papagos.

Tci'-itkwatak, Lithospermum sp. The leaves are eaten without preparation.

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[a] C. D. Poston stated in 1864 that he had recently furnished the Pimas with 500 pounds of cotton seed, though he did not give any reason for doing so. It is fair to presume that the Pimas had sufficient seed from the plant that they had raised from time immemorial.

Tcil'tipĭn (Sp.). This pepper is raised by the Papagos and brought to the Pimas.

Tco'hokia. The leaves are gathered in spring and sometimes baked in tortillas. In summer the seeds are gathered, ground on the metate, mixed with meal or squash, or they may be parched and ground to be eaten dry.

Tco'tcĭk â'nûk, Suæda arborescens; S. suffrutescens. These are added to greens or cactus fruit to give flavor.

To'a, Quercus oblongifolia. The acorns of this oak are traded from the Papagos. After the hulls have been removed they are parched and ground into meal.

Ąrtam, Atriplex lentiformis. The seed of this saltbush is cooked in pits which are lined with Suæda arborescens and the papery inner bark of the cottonwood moistened and mixed together. The roasting requires but one night, then the seeds are taken out, dried, parched, and laid away for future use. When eaten, it is placed in a cup and water added until a thick gruel is produced.

Vakwai'hai-ĭndûm, Solanum elæagnifolium. The berries are put in the milk from which cheese is made to serve as a substitute for rennet.

Vak'wandam, Rumex berlandieri. This plant is used with the cactus fruit, Opuntia arborescens, in the same manner as the saltbush, Suæda arborescens.

Vi'pĭnoĭ, Opuntia versicolor. The fruit is sometimes eaten raw, but it is usually prepared in the same manner as Opuntia arborescens.

Dr Edward Palmer, who collected among the Pimas in 1885, obtained some nuts of the "quinine plant," Simmondsia californica Nutt., which he says are eaten either raw or parched. Professor Thornber states that the Mexicans use the oil as a hair tonic. He also describes an "Indian potato," Hoffmanseggia falcaria Cav., which, when roasted, tastes like the cultivated Irish potato. However, this is a member of the pea family and not a potato. A true Solanum is found native to Arizona, but we have not learned that the Pimas know of it.

At least three kinds of chewing gum are in use. That most highly esteemed is called vi-ipam, "milky;" it is obtained from a plant which somewhat resembles a sweet-potato vine. The pointed pods are gathered, their milk poured into a squash stalk and heated in the ashes, whereupon it is ready to chew. A bush, Encelia farinosa, called *tohafs*, exudes a clear gum; and that on the stems of some of the Compositae is sometimes gathered and chewed by children.

MEDICINAL PLANTS

A'taftak. The root of the wild gourd[a] is pounded up in mortars, boiled, and the extracted juice put into the ear to cure earache. It is poured into a hollow tooth to stop aching. "It kills maggots in open sores."

Ha'tam, Sphæralcea angustifolia. The leaves are boiled and used as a remedy for diarrhea. Another informant states that the root is boiled and the liquid extracted is used as a remedy for biliousness.

Ka'kaitco v-vs, "quail plant," Heliotropium curassavicum. The upper part of the light yellowish root is dried and ground in mortars, dried again, and ground very fine upon the metate, when it is ready to be applied to sores or wounds after they have been washed.

Kâl·pitäm. The leaves of this bush are boiled and the extract used as an emetic.

Kŏĭ, Prosopis velutina. The black gum of the mesquite is boiled and the dilute liquid used as a wash for sore eyes and open wounds. The inner bark of the mesquite is boiled and the liquid used as an emetic and cathartic.

Kŏĭtcĭlt, Prosopis pubescens. The bark of the root of the screw bean is pounded up in mortars, dried, and again ground into a fine powder on the metate; or it may be boiled without pounding or grinding and the liquid used as a dressing for wounds. After a few days, as the wound heals, the dry powder is substituted.

Osikâkamûk, Pluchea borealis. The bark of the arrow-bush root is separated by pounding between stones and then placed in water for a few hours to extract a liquid for washing the face and for sore eyes.

O'sitcvwûtpat, Zizyphus lycioides. The root of this bush is pounded up in mortars and boiled, the liquid extracted being used as a remedy for sore eyes.

Pihoɿ. An evil spirit that lives in the east is called Pihoɿ. He causes certain diseases, which have their appropriate songs. One informant declared that a tree that grows near the Maricopa village on the Gila was also called pihoɿ, and from it a medicine stick is made that will cure diseases of the throat. The writer was unable either to verify or to disprove this statement.

Rsios. Two unidentified species of Bigelovia are used as a dressing for scarified wounds. The bruised leaves are applied to bleeding surfaces that have been cut with broken glass.

Rsvkaikokŭk, Larrea mexicana. The leaves of the creosote bush (pl. IX, *a*) are boiled and the liquor is allowed to cool a little, when it is drunk as an emetic. The boiled leaves are also used as a poultice.

[a] In pioneer days the whites used the roots of two species of wild gourds, Cucurbita palmata and C. digitata, as a cathartic, Doctor Palmer stating that they were "very much beliked by the soldiers."

Sivitcŭlt, Rumex hymenosepalus. The root of the canaigre is dried, ground and the powder applied to sores.

So'am hi'âseikkam, "yellow flower." An infusion made from the flowers of this plant is used as a remedy for sore eyes.

Ąrtam, Atriplex lentiformis. The root is powdered and applied to sores.

Ąrto, Krameria parvifolia. Used in the same manner as the preceding.

Vai'ewa, Xanthium canadense. Cocklebur pulp is combined with soot as a remedy for sore eyes.

Va'vaĭsh, Houttuynia californica, called "yerba mansa" by the Mexicans. The roots are crushed and boiled. The extract is used as a tea for consumptives, according to one informant, and as an emetic according to another.

Vipûkam, Alba marginata. The root is chewed as an emetic.

Teamsters' Tea, Ephedra antisyphilitica Berland, is a native of Arizona, and is used by the Pimas in making a beverage. It is also used by both the Pimas and Mexicans as a remedy for syphilis.

A composite, Perezia wrightii, is used as a styptic.

Thamnosma montanum is said to be used as a decoction for the cure of gonorrhea by the Pimas and Apaches. (Dr Edward Palmer, manuscript.)[a]

ANIMALS USED FOR FOOD

Kâ'-âtci, or *tâsi'-ikâlt*, Tayassu angulatum sonoriense. The peccary is yet found in the larger mountain chains that were formerly reached by the hunters of Pimería, though the Gila river is about the northern limit of the range of this animal in the West. It could never have been an important article of diet, and is practically unknown to the younger generation.

Kaf, Taxidea taxus (subspecies?). The badger is occasionally seen along the Gila, but is not abundant and is no longer eaten. It is one of the animals that cause disease among men, and a badger tail is an essential part of the medicine-man's equipment.

Ka'katco, Lophortyx gambeli. The handsome topknot quail is the most abundant of the feathered inhabitants of the Gila thickets. It is tabued to the women, though no explanation for this could be discovered.

Kâ'sŏn. A "rat" was formerly eaten, but it was found impossible during my stay to get specimens for identification.[b]

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[a] This is similar to, but not identical with, the "cordoncillo" of the Arizona Mexicans, from which an infusion is made that is used as a tonic and blood purifier. (Thornber.)

[b] Mr Fisher, of the Biological Survey, lists the following species of mice and rats for Pimería: Mus alexandrinus, introduced; Mus musculus, introduced; Mus norvegicus, introduced; Orychomys torridus; Peromyscus, 2-3 species; Sigmodon hispidus arizonæ; Reithrodontomys (sp.?); Neotoma (sp.?); Fiber zibethicus pallidus.

Kâ'vi, Castor canadensis frondator. The beaver was common along the Gila, and was esteemed highly for food.[a]

Ka'viyo, Equus caballus. The horse is seldom eaten by the Pimas. In times of famine, however, horses are sometimes used, although the more than half-starved condition of the animals suggests anything but nourishing viands.

Ko'-ovĭk, Antilocapra americana mexicana. The antelope is now unknown in Pimería, but the hunters of former centuries successfully stalked these animals upon the mesas, particularly upon the higher grassy plains to the eastward.

Ma'kûm. These unidentified worms (?) are plentiful when a rainy season insures a heavy crop of desert plants. They are gathered in large quantities, their heads pulled off, and intestines removed. The women declare that their hands swell and become sore if they come in contact with the skin of the worms. The worms are then put into cooking pots lined with branches of saltbush and boiled. The skins are braided together while yet soft and dried a day or two in the sun. The dry and brittle sticks are eaten at any time without further preparation.

Ma'vĭt, Felis hippotestes aztecus. The puma is yet abundant in the mountain ranges of Arizona, and in former times one was occasionally secured by the Pimas when in quest of other game.

Rsu'lĭk. There are at least six species of ground squirrels in this region,[b] but in the absence of specimens the writer could not learn if the Pimas distinguished among them. When water was obtainable it was poured into the burrows of these squirrels until they were driven out, whereupon they were killed with clubs or shot with arrows. They were tabued to the women under penalty of nosebleed or deficiency in flow of milk for their babies.

Si'-ĭk, Odocoileus couesi. White-tail deer are yet fairly common in the mountains and two deerskins were seen among the Pimas during the period of six months spent with them. Perhaps one in two or three years would be an excessive estimate of the number killed by the men of the Gila River reservation. The deer figures largely in their traditions and religion.

Ta'matâlt. During the winter months these birds are caught at nearly every house by means of traps. The trap commonly used is described on page 101.

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[a] The earliest American invaders of Pimería were beaver trappers who descended the Gila early in the last century. One of the first Americans that the oldest living Pimas remember was Kâ'vi Vâ'namam, "Beaver Hat," who told the Pimas that the buildings now in ruins along the Gila and Salt rivers were destroyed by waterspouts. He lived several years among the Pimas, and was finally killed near Prescott by Apaches.

[b] Eutamias dorsalis (?), Spermophilus canescens, S. grammurus, S. harrisi, S. spilosoma macrospilotus (Oracle), S. tereticaudus (Fort Yuma).

Tâpi, Lepus arizonas. The small cottontail is fairly common in river bottoms and on the mesa throughout the Pima country. It is shot with arrows made with a straight point without stone or metal head. It is included in the list of victims that result from rabbit drives in which the hares, Lepus texianus and L. alleni, are the principal desiderata.

Tcirsâny, Ovis nelsoni. The mountain sheep has served as food when obtainable, though it has been many years since they have been abundant.[a]

Tcok tcof, Lepus texianus. There are two species of large hares along the Gila, where they are termed "jack rabbits" by the whites, very few of whom distinguish them apart. The Pimas, however, recognize the difference and call this species the dark or gray, and the other the white, *tcof*.

Tcu'tcult, Gallus domesticus. During the late Spanish and the Mexican régime a small breed of fowl was introduced, probably by the Papagos, which in turn gave way to the large varieties brought by the Americans in the last half century. Hens' eggs are eaten either fried or boiled. One of the interpreters confided to Mrs Russell that she economized time and labor by boiling the eggs in the coffee.

To'a tcof, Lepus alleni. These are common and utilized for food to a considerable extent. There seems to be no preference for one species of hare over the others, but "none are so good as beef." The stomachs of this hare and of Lepus texianus are used in making cheese.

Va'owŏk, Procyon lotor. The raccoon is said to be used for food, though the writer did not see any of the animals or any of their skins during a stay of a year and a half in Arizona.

Vâ'prsa, Thomonys cervinus. Gopher hunts are occasionally arranged in a manner similar to those in which the hares are driven. The animals are poked out of their retreats with sticks and without preparation thrown upon the coals to roast.

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[a] "Having traversed 4 leagues, we arrived at a town, Tusonimon, which is so named from a great heap of horns, from the wild or sylvan sheep, which appears like a hill, and from the numbers that there are of the animals, they make the common subsistence of the inhabitants." (Juan Matio Mange: Diary extract translated for Schoolcraft, III, 303.) This visit of Mange to the Pima towns was in November, 1697. The discovery of this statement by Mange and also a letter of inquiry from Mr Hodge directed the writer's attention to the significance attaching to the horns of the mountain sheep after he had returned from his sojourn among the Pimas. Inquiry was then made of a number of Pima correspondents and of Mr C. H. Cook, at Sacaton. The latter ascertained from Antonio Azul, the head chief, that the horns of the mountain sheep were never brought home by hunters, which does not agree with Mange's statement. Each man had a place set apart where he deposited them in order that they might exert no evil influence upon the winds or rains. At times the Papagos held rain ceremonies, during which the medicine-men deposited the tails of mountain sheep together with eagle feathers at springs. The same tribe at one time sacrificed some children in their efforts to increase the supply of water, but "instead of bringing them water this dried up all the springs." A few mountain sheep remain in the Superstition mountains and in the other high ranges near and on the reservation. When climbing the Sierra Estrella, in March, 1902, the writer saw a flock of five which did not manifest any such fear at the sight of man as do the mountain sheep of British Columbia and the more northern Rockies. Indeed, the Pima chief at the foot of the mountains explained the reason for their indifference very adequately when he declared the sheep were game fit only for the Papagos, who had no fields to look after.

Vatop. There are occasional references to fish in the traditions of the Pimas and the notes of Spanish and American travelers sometimes mention them. It is certain that at times they caught large numbers of fish, but in seasons of drought the river, then as now, becoming wholly dry near the villages, could not be relied upon to furnish such a convenient supply of food. Either the long series of dry years and the absence of fish have caused the people to forget former classifications or else they never distinguished one species from another, for they now have but one name for all fresh fish. However, there were several species in the Gila and adjoining streams that were large enough for food.[a]

Wh'aĭ, Odocoileus hemionus (subspecies?). Information concerning this species was very vague and unreliable, though it seems certain that the black-tail deer was sometimes killed by the Pimas, at least before the growing power of the Apaches prevented the former from roaming through the mountains that border Pimería on the north and east.

Wo'poldo, Equus asinus.[b] The burro (donkey) is not in high repute among the Pimas, where the distances to the white settlements and between villages necessitate a more speedy animal for draft or riding purposes. Few in number, they could not be very important as an article of diet. They have been eaten in the past, but are rarely so used at present.

Snakes are not eaten, even in times of famine, and the idea of eating lizards is repudiated with scorn.

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[a] Garcés, who traversed the Pima country in 1775, wrote: "There is found in this river no other fish than that which they call matalo'te, which is so very savory to the taste, but is troublesome on account of the many bones that it has." (On the Trail of a Spanish Pioneer, II, 142.) Jordan says: "Garcés's remarks settle the matalo'te. There are no large fish in the Gila except the two large, bony chubs called, by Baird and Girard, Gila robusta and Gila elegans. In the very mouth of the river there is also a big, rawboned sucker of the same build, called Xyrauchen cypho, the Razor-back or Hump-back Sucker. The Gila is a hump-back chub, about a foot and a half long, with a low, large mouth and a long, broad tail. It is popularly known as Bony-tail, Gila Trout, and Round-tail, and is about as poor eating as a fish can be." The Land of Sunshine, XIII, 436.

In The Fishes of the Colorado Basin, Evermann and Rutter enumerate several species that must have been accessible to the Pimas. Their names and the localities where they were collected are as follows:

Pantosteus arizonæ Gilbert. Salt river, Tempe.
Pantosteus clarkii (Baird and Girard). Gila river, Fort Thomas.
Catostomus latipinnis (Baird and Girard). Rio San Pedro and Fort Thomas.
Catostomus gila Kirsch. Fort Thomas.
Catostomus insignis Baird and Girard. Rio San Pedro and Fort Thomas.
Xyrauchen cypho (Lockington). Mouth of Gila and Fort Thomas.
Ptychocheilus lucius Girard. Various stations on the Gila. Called Gila trout by Emory in 1848.
Gila elegans Baird and Girard. Taken from several places along the Gila by collectors.
Gila robusta Baird and Girard. Also described from several Gila stations under various names.
Cyprinodon macularius Baird and Girard. "Rio Gila."

In addition to these may be included the species collected in the San Pedro and Santa Cruz rivers, which are both tributaries of the Gila above Pimería and within reach of Pima hunting parties: Leuciscus niger (Cope), Tiaroga cobitis Girard, Agosia oscula (Girard), Agosia chrysogaster Girard, and Meda fulgida Girard.

[b] It is uncertain whether the burro of the Southwest is a descendant of the Asiatic species of wild asses, Equus hemionus, E. heniihippus, and E. onager, or of the African, E. africanus and E. somaticus.

Domestication of Animals

Dogs. The only domesticated animal which there is any certainty that the Pimas possessed at the time of the discovery is the dog. The old people say that in their youth the dogs were all alike and resembled coyotes. At present there are many small mongrels, obtained principally from the Mexicans (pl. VI, *c*). The dogs have shared with their masters the misfortunes of the last few years. Scarcity and want has left them gaunt and weak. They formerly served a useful purpose in giving warning of the presence of enemies about the villages. There are now no enemies and little within to tempt the thief to enter and steal. Dogs are called by the word "toot," "toot," "toot," uttered rapidly in a falsetto voice, the individual at the same time holding out a morsel of food to lure the animal within reach. A dog that has been bitten by a mad dog is saved by having a cross burned on its head.

Horses. The horse may have been seen by the Pimas in the sixteenth century, but it is doubtful if they obtained this animal before the seventeenth. They have been known so long that their origin has become accounted for by myths without a shadow of historic truth in them. The only individual who ventured to dispute the commonly accepted mythical origin assured me that they came from the West. Font, who visited the Gila in 1775, stated that his party was met by 18 mounted Pimas; so that the horse was evidently in use at that time.

There were very few horses among the Pimas until the last quarter of a century. The statements of the old persons agree with the calendar records, which make it evident that there were horses enough for but a small proportion of the warriors who engaged in conflicts with the Apaches. Horses stolen in Mexico were sold to the Papagos, who in turn sold them to the Pimas at much less than their true value. As the number in Pimería increased, the thieves began to operate in both directions, selling Sonoran horses on the Gila and Piman mounts in Sonora. However, this practice has been abandoned, and the tribe has quite as many horses as are needed. They are rather undersized animals, as may be seen from the pinto pony in figure 5. As the fields now yield an insufficient supply of food for their owners, it follows that there is little grain for the horses, which grow poor and thin in winter; indeed, many die of starvation. Their principal food during that season is saltbushes.[a]

The once famous grassy plains that made the Pima villages a haven of rest for cavalry and wagon-train stock are now barren,

[a] Professor Thornber says that "the native saltbushes, arranged in the order of their importance, that are eaten by range stock are as follows: Woody species, Atriplex canescens, A. nuttallii, A. polycarpa, A. lentiformis, A. confertifolia. The herbaceous species that are grazed by stock are: Atriplex coronata, A. elegans, A. bracteosa. The true greasewood, Sarcobatus vermicularis, a species closely allied to the saltbushes, is also browsed to a considerable extent.

and it is not until the mesquite leaves appear in April that the horses can browse upon food sufficiently nourishing to put them in good condition. As the mesquite beans ripen, in June and July, live stock fattens rapidly. A few owners gather and store the beans for stock feed. Very few are able to buy hay or rolled barley.

Cattle.[a] Sala Hina declared that her father and his brother, two Kwahadk'ṣ, brought the first cattle to the Pimas about 1820. The Spanish missionaries throughout Papagueria brought live stock to their stations for at least two centuries before the date given, so that

FIG. 5. Men and women in modern costume, and pinto pony.

the Pimas were at least aware of the value of cattle for a long time. The custom of killing and eating the cattle at the death of their owners contributed materially toward preventing increase in Pima herds. Oxen were very scarce for half a century after their introduction, and the old men and women speak sadly of the weary waiting for their turn to use the single ox that dragged the wooden plow for perhaps a whole village. Oxen are now no longer used; with their head yokes and the wooden plows they are of the past,

[a] In 1846 Emory found that "they have but few cattle, which are used in tillage, and apparently all steers, procured from the Mexicans. Their horses and mules are not plenty, and those they possessed were priced extravagantly high." Notes, 84.

and of that period of the Pimas' past that it is best for them to forget.

Cattle are driven and "roped" with the lariat, but no conventional mode of calling them is in vogue. Like the horses, they are branded and run at large. Their range is almost unlimited in some directions, but the entire absence of water away from the river prevents them from straying. With horses, cattle formed a great attraction to the Apaches during the last century until peace was declared in 1879, and the Pimas suffered frequent losses, for some of which, it must be added, the marauders paid dearly. To guard against the thieves it was customary to corral all stock within the village at night. When it strayed away across the mesas during the day it was sought by tracking or by waiting at the water holes, and while so engaged the men had many encounters with the enemy, who were ever on the lookout for such an opportunity to attack.

Mules. A few mules are raised, but, like the horses, they are small and of little value.

Donkeys. While the burro has been used for some time, it is not a popular animal among the Pimas. It is too slow for traveling across the wide, waterless plains of Pimería and is not adapted for farm work.

Poultry. Until the recent introduction of large American breeds a small breed of poultry had been kept for several years.[a] This had been obtained from the Mexicans, from whom also the manner of calling "pul," "pul," "pul" was derived. With the new breeds came the American custom of calling "peep," "peep."

Eagles and *red-tailed hawks* were kept for their feathers. All the inhabitants of a village assisted in catching lizards and in furnishing other suitable food for the village bird. The feathers were regularly plucked for the paraphernalia of the medicine-men.

Sonora doves were and are yet confined in log-cabin cages built up of arrowwood rods.

AGRICULTURE

METHODS

IRRIGATION

The Gila river carries an unusually large amount of suspended matter when in flood. As shown by the tests made during the surveys for the dam which is intended to supply Pimería with water, it carries on an average 10.5 per cent of mud, with a maximum of 20 per cent.[b] The entire bottom land upon which the fields are located has been built of this material. It is so light that wagons cut readily into it during the dry seasons and work it into fluffy dust several

[a] "A few chickens and dogs were seen." Emory, Notes, 85.
[b] Water-Supply and Irrigation Papers, no. 33, p. 36.

inches in depth. The Pimas do not practise rotation of crops, the soil being so rich from silt which is periodically deposited by the river at flood stage that the idea of exhausting it has never occurred to them.

Irrigation was practised for unknown centuries by the Hohokam, and the course of their great canals can yet be traced for miles,[a] not only along the river bottoms, but also across the mesas where the large water-worn pebbles bound together with caliche[b] or deposited lime must have required infinite labor for their construction. At the first appearance of the Pimas it may be presumed that they used the canals already constructed by their predecessors, hence they would be dull indeed if they could not maintain irrigation systems sufficient for their needs. The testimony of the early writers is to the effect that they possessed canals larger than they required and that the water flowed away from the fields in volume scarcely diminished from that at the head gates. The Gila has a uniform fall of 8 feet to the mile at this place, while the canals need not have more than 2.

As the water of the Gila and Salt rivers is strongly impregnated with alkali it tends under certain conditions to deposit salts in such quantities that the land is rendered unfit for use. The alkali rises to the surface in an efflorescence that resembles snow in appearance. From early descriptions of the country we learn that alkaline deposits were known while the tribe was yet under purely aboriginal conditions.[c]

The Pimas knew, however, how to deal with this difficulty—they flooded the tract repeatedly and in this way washed the alkali out of it. They declare that they never abandoned a piece of ground because of it.

No very reliable estimate of the total amount of land cultivated by this people has been made.[d] Each family cultivates from 1 to 5 acres. With an abundance of water and the new needs of the tribe it is probable that the size of the individual holdings will rapidly increase. The farms are rectangular, arranged with reference

[a] "The mode of canal construction employed by these pueblo builders [Hohokam] was another indication of their patience and industry. Their canals are models for the modern farmer to imitate; yet they could have been dug in no conceivable manner save by the laborious process of hand excavation with stone or wooden implements, the earth being borne away by means of blankets, baskets, or rude litters. Notwithstanding this, the outlines of at least a hundred and fifty miles of ancient main irrigating ditches may be readily traced, some of which meander southward from the Salt river a distance of fourteen miles." F. W. Hodge, "Prehistoric irrigation in Arizona," American Anthropologist, VI, 324.

[b] For an account of this formation see P. Blake, "The caliche of southern Arizona: an example of deposition by vadose circulation," in The Genesis of Ore Deposits, 710.

[c] "We continued [from Casa Grande] toward the west, over sterile plains. On all the grounds about these buildings there is not a single pasture; but appear as if they had been strewn with salt." Mange's Diary, in Schoolcraft, III, 303.

[d] Garcés, writing in 1775, stated that "Todos estos pueblos hacen grandes siembras de trigo, algunas de maiz, algodon, calabazas y otras semillas, para cuyo riego tienen formadas buenas acequias, cercades las milpas con cerco comun, y divididas las de distintos dueños, con cercos particulares." Doc. His. Mex., 2d ser., I, 235.

to the supplying canal, and are always fenced with some care (pl. XI, *a*). Before the Pimas obtained barbed wire from the Government the fences were of willow wattling or the tops of mesquite trees and various kinds of brush. When a tract was newly brought under irrigation a committee of six men was chosen to make allotments to those who had assisted in digging the ditches. They chose the best land for themselves, which seems to have been taken as a matter of course, in a measure compensating for their trouble. The plots were from 100 to 200 "steps" (see p. 93) in width, according to the number in the family to whom they were allotted. The brush was not difficult to remove even with the primitive implements at their command; the mesquite trees were not cut down, but their lower branches were trimmed so that they did not shade the ground to any considerable extent.

The canals were dug with the digging stick and shovel (fig. 10, *a*, *b*), the former being also used to prepare the easily pulverized ground and to plant the seed. In addition to the digging stick and shovel the primitive agriculturists also used a wooden implement which served the purpose of a hoe, though it resembled a weaver's batten in appearance (fig. 10, *c*). In comparatively recent times the wooden plow (fig. 11) was added to the list of implements. From the Mexicans they also obtained a hybrid implement (fig. 10, *d*) that combined the functions of spade and hoe. At the present time the tribe is supplied with modern agricultural implements by the Government. The crops, however, are stored in much the same way that was followed in prehistoric times, in circular bins of willow, arrow bush, and wheat straw, the last having been used since the introduction of wheat.

One of the Pima villages (pl. XI, *b*) situated southwest of the Maricopa wells was too far from the river to obtain water from it and depended, as do their kinsfolk and neighbors, the Kwahadk'ṣ, already referred to, on flood irrigation. To secure the benefit of this, they cleared fields on mesa slopes, over which water from the surrounding hills might be conducted whenever there were summer rains. Around the lower sides of the diminutive fields low dikes were raised to catch and retain the water. On the slopes of the Santan hills north of the present Pima village of Santan there are several hundred acres of stony mesa that have been cleared and cultivated (pl. IV, *a*, *b*). The rocks have been gathered in rows that inclose rectangular areas of but a few square yards in extent. There are about six clumps of creosote bush inclosed in it.[a] This locality adjoins a large ancient canal and

[a] At various places in the Southwest the writer has seen extensive areas over which the loose bowlders that were originally thickly scattered on the surface had been gathered in rounded heaps or in rows that divided the ground into rectangles that average about 5 meters to the side. The largest of these "fields" personally inspected is north of the town of Pima, nearly 200 miles east of the Pima reservation. On a lava-strewn mesa that is too high to be irrigated and too far from the hills to be flooded

an extensive ruin of a stone pueblo. Learning that the chief had declared that these fields had been cultivated within the memory of living men, the writer sent for him, but learned on questioning that neither he nor any other Pima knew aught about them. All the fields, canals, and cleared roads over the lava hills that appear in plate XI, *c* were the work of the Hohokam.

FIG. 6. Burden bearer.

DIVISION OF LABOR

The work of clearing the fields, planting, and irrigating devolved upon the men. The women harvested the crops, carrying the products in their kiâhâs. The men thrashed the wheat—with horses after those animals were introduced. Prior to that time, and even now when the crop is small, the women beat out the grain with straight sticks. As it was thrashed, the women winnowed it in baskets and piled it on a cotton cloth, the corners of which were tied together, forming a sort of sack that was thrown upon a horse and taken by the men to the storehouse or brought in sacks on their heads by the women (fig. 6). Pumpkins and all crops except wheat were carried by the women in their kiâhâs. Considering the fact that the Pimas were constantly harassed by the Apaches, so that the men could not safely lay aside their bows during any waking moment, this distribution of labor was not discreditable to them.

there are a half dozen of these tracts. The largest is a little more than half a mile in length by nearly a quarter in width. There are no signs of human occupation on the surface other than the disposition of the stones. Five miles east of Solomonsville there is a similar field and on the Prieto plateau 40 miles northeast of the last is another among the pines. These fields are distinctly different from the terraces that one sees on the north slope of Mount Graham and elsewhere.

PRODUCTS

Possessed of the foremost American cereal, maize, at least one variety of legume, and the cotton plant, as well as species of Cucurbitaceæ and other plants, the agriculture of the Pimas was well beyond the initial stages before the arrival of the whites.[a]

CEREALS

The Pimas distinguished half a dozen varieties of maize, to which they have now added the large corn brought by the Americans. The first crop is planted in April and the second in July, the first being gathered in June and July and the second in October. When gathering corn the women lay aside the best ears for seed; they are stuck in pairs on sticks and carried in the hand. Wheat is now the principal crop, and when a wet season insures sufficient water several million pounds are raised. It is sowed in December and reaped with hand sickles in June. Of the several varieties "Sonora" and "Australian" are favorites. One called skaofkutco was raised before Kâ'mâl tkâk's father was born. Wheat is ground for the Pimas at the Government mill at Sacaton (pl. I), but a great deal of it is yet parched and ground on the metates to be made into pinole.

There have been at least half a dozen trading stores on the Gila River reservation for a number of years whose principal trade has been in wheat. The traders have naturally encouraged the growing of this cereal as much as possible and assisted in the introduction of suitable varieties. They have also profited in a legitimate way from the contracts awarded by the Government in times of famine for the support of the natives.

[a] "In the year 1858, the first year of the Overland Mail Line, the surplus crop of wheat was 100,000 pounds, which was purchased by the company; also a large quantity of beans called *taperis*, and a vast quantity of pumpkins, squashes, and melons. In 1859 Mr St John was sent among them as a special agent with a supply of seeds and some agricultural implements. That year they sold 250,000 pounds of wheat and a large supply of melons, pumpkins, and beans. In 1860 they sold 400,000 pounds of wheat—all the Mail Company would purchase. They had more, and furnished the Government and private teamsters all that was necessary for transportation from Fort Yuma to Tucson. Beyond this they had no market, except for about 40,000 pounds of wheat which Mr White purchased for the supply of Fort Breckenridge. In 1861 they sold to Mr White 300,000 pounds of wheat, 50,000 pounds of corn, 20,000 pounds of beans, and a large amount of dried and fresh pumpkins, which was all intended for the support of the California Column. The greater part of this crop was destroyed or given back to the Indians by the Texans under the guerrilla, Hunter, who arrived at the Pimo villages that year, robbed Mr White of his property, and took him prisoner in their flight to the Rio Grande. The Pimos sold, during the same year, 600 chickens and a large amount of other stuff, showing a gradual increase of production under the encouragement of an increased demand. In 1862 they sold to the Government over a million pounds of wheat, included in which was a portion of the previous year's crop, returned to them by the Texans. They furnished pinole, chickens, green peas, green corn, pumpkins, and melons for the entire California Column, subsisting nearly a thousand men for many months." (J. R. Browne, Adventures in the Apache Country, 110.) Browne's statements about the Pimas, though not grossly inaccurate, are not generally reliable, but as he was intimately acquainted with A. M. White, with whom he traveled from California, it is probable that the above estimates are as nearly correct as circumstances permitted.

Oats are seldom raised in that region. They are called "white tassels" by the Pimas. Barley is the universal grain feed of Arizona, and there is a ready market for the small quantity the Pimas raise.

VEGETABLES

Watermelons, muskmelons, pumpkins, and squashes are extensively cultivated. The watermelons are preserved until after the 1st of January by burying them in the sands of the river bed. The pumpkins, squashes, and muskmelons are cut in strips and dried, the best-keeping varieties being left in the storehouses until midwinter (pl. XXXV, *f*). According to tradition the first pumpkins, called rsas'katûk, were obtained from the Yumas and Maricopas.[a]

FIG. 7. Gourd canteen.

There are three species of wild gourds that are quite common along the Gila, namely: Cucurbita fœtidissima H. B. K., C. digitata Gray, and Apodanthera undulata Gray. Cultivated gourds have been known to the Pimas for a long period—how long it is impossible to say. The Papagos have a tradition that this plant was introduced by Navitco, a deity who is honored by ceremonies at intervals of eight years—or, if crops are bountiful, at the end of every four years—at Santa Rosa. The gourd is used as a canteen (fig. 7), and if it becomes cracked a rabbit skin is stretched over it which shrinks in drying and renders the vessel water-tight again. Dippers and canteens are occasionally made of gourds, but the chief use of gourds seems to be in the form of rattles (fig. 8) which contain a little

FIG. 8. Gourd rattle.

[a] When Garcés was among the Yumas in 1775 they were raising "countless" calabashes and melons—"*calabazas y melones*, perhaps better translated squashes and cantaloupes, or pumpkins and muskmelons. The Piman and Yuman tribes cultivated a full assortment of cucurbitaceous plants, not always easy to identify by their old Spanish names. The *sandia* was the watermelon invariably; the *melon*, usually a muskmelon, or cantaloupe; the *calabaza*, a calabash, gourd, pumpkin, or squash of some sort, including one large rough kind like our crook-neck squash. * * * Major Heintzelman says of the Yumans, p. 36 of his Report already cited [H. R. Ex. Doc. 76, 34th Cong., 3d sess., 1857]: 'They cultivate watermelons, muskmelons, pumpkins, corn, and beans. The watermelons are small and indifferent, muskmelons large, and the pumpkins good. These latter they cut and dry for winter use [they were brought to Pimería before the Maricopas came to Gila Bend].'" Note in Coues' On the Trail of a Spanish Pioneer, New York, 1900, I, 170.

gravel and are mounted on a handle. Gourds are never used as forms over which to mold pottery.

At least five varieties of beans are now cultivated. The first known, the tatcoa pavfi, "white bean," is said to have been brought in some forgotten time from the valley of the great "Red river," the Colorado. Considerable quantities are raised and the thrashing is done by horses driven in a circle on the same hard floor that is prepared for the wheat thrashing.

Not with the withering drought alone has the Gileño planter to contend, but also with the myriads of crows that are extravagantly fond of a corn diet, and with the numerous squirrels and gophers that thrive apace where protected in a measure from the coyotes, which are themselves a menace to the fields. From the birds and predatory animals the fields are guarded during the day by the boys, who amuse themselves meanwhile by a dozen games that develop skill in running, and shooting with the bows and arrows which scarcely leave their hands during their waking hours. Scarecrows, "men artificial," are used, but a fluttering rag was never as effective as a feathered shaft hurtling from a well-drawn bow. Night marauders were in olden times kept at a distance by the rings of the terrible cholla cactus, Opuntia bigelovii Engelm., that were laid up around the individual plants. Plate XII illustrates this cactus as it grows on the hills about Sacaton. It is recognized as the most effectually armed of the many cacti and is the symbol in Pima lore of impenetrability.

TRADE

STANDARDS OF VALUE

For purposes of trade or in gambling the following values were recognized: A gourd was equivalent to a basket; a metate, a small shell necklace, or the combination of a basket and a blanket and a strand of blue glass beads was equivalent to a horse; a string of blue glass beads 4 yards long was equivalent to a bag of paint; and a basket full of beans or corn to a cooking pot.

MEASURES

The principal linear measurement was the hʉmakâ os, "one stick," equal to the distance from the center of the breast to the finger tips. The writer is inclined to regard this as a primitive Pima measurement, notwithstanding its resemblance to the yard of the invading race. This corresponds with the Aztec cenyollotli, the Cakchiquel ru vach qux, and the Maya betan.[a] It was the basis of a sort of decimal system, as follows: Ten "sticks" made one "cut" of calico, equivalent to a "load" of wheat, or about 150 pounds. Ten cuts or loads were equivalent to

[a] D. G. Brinton, The Lineal Measures of the Semi-civilized Nations of Mexico and Central America.

one horse in value. Two units were employed in measurement of distances. One of these is an ancient measurement which it will be of interest to apply to the Hohokam ruins of the region. It is humakâ kuirspa, "one step"—that is, one step with the same foot, equal to about 5 feet. Land is divided into plots 100 or 200 "steps" in width, according to the size of the family. Long distances were measured in terms of a day's journey on foot; thus it is said to be seven days to Zuñi. The term "step" is also applied to the English mile, but they have had as yet little opportunity to acquire a definite knowledge of the meaning of the latter term.

BARTER

For a long period prior to 1833 the Maricopas lived at Gila Bend and came at harvest time to trade with the Pimas. Soon after that time they settled beside the Pimas, living upon such intimate terms with them that barter between the tribes was of no more consequence than between two Pima villages.[a] With all other tribes they were perpetually at war, except with their Papago kinsfolk to the southward. These people live in a vast territory of cactus-covered plains, here and there interrupted by up-thrust barren peaks that, with striking outlines, form good landmarks and yet offer little to those that hunger and are athirst. The Papagos are a desert tribe, and yet so well had they mastered their all but hopeless environment that the trade which they carried on with the Pimas was by no means one-sided, as may be seen from the following list of products that were formerly brought to the Gila at the time of the June harvest. Of vegetable products there were saguaro seeds, the dried fruit and sirup; tci'aldi, a small hard cactus fruit; agave fruit in flat roasted cakes; agave sirup; rsat, an unidentified plant that grows at Santa Rosa; prickly pear sirup; wild gourd seeds; a small pepper, called tcĭl'tipĭn; acorns of Quercus oblongifolia; baskets of agave leaf; sleeping mats; kiâhâs and fiber to make them; maguey fiber for picket lines. They brought the dried meat of the mountain sheep, deer meat, deer tallow in small ollas, buckskins, dried beef, tallow, cheese, and cords of human hair. Cattle were formerly traded "sight unseen," but the modern "education" of the Papagos led them to exaggerate the good qualities of their stock and even to deal in "fictitious values," or cattle that the new Pima owner sought in vain to find, until finally the Pimas would consider no proposition to trade stock unless the animals were exhibited. Of mineral products they brought red and yellow ochers for face and body paint, and the buff beloved by Pima weavers. They

[a] The author of the Rudo Ensayo, who wrote in 1762, stated that "these very numerous nations [Opas and Maricopas] inhabit both sides for a distance of 36 leagues down the river, and at the far end of their territory there is a very abundant spring of hot water a short distance from the river to the north." This spring is now known as Ojo Caliente; it is at the southern end of the Bighorn mountains. Guitéras translation in Records of the American Catholic Historical Society, v, 129.

made religious pilgrimages to the salt lakes below the Mexican boundary to obtain the sacred salt. They lived on pinole during the journey and walked with their eyes fixed upon the trail, looking neither to the right nor to the left.

As they approached the shore of the lagoon in which the Great Spirit resided they ran at topmost speed and circled four times around the salt deposits before those who understood the proper ritual began to collect the salt. Even on the homeward journey there was magic power in the salt, and if a horse died the whole load was thrown away. As the salt gatherers approached the home village they were given a noisy welcome but were compelled to remain outside for four days, and for a long time thereafter they must abstain from certain acts that need not be detailed here. For four days those who remained at home sang for those who journeyed, and then all might eat the salt and were free to bring it to the Pimas.[a] The latter sometimes made journeys to the lake for salt, being two days on the way to Quijotoa and two days on the trail beyond.

In exchange for the objects of barter brought to them the Pimas gave wheat, which was also given the Papagos for aid in harvesting it; corn; beans; mesquite beans; mesquite meal, roasted in mud-lined pits; cotton blankets and cotton fiber, with the seed; dried squash, pumpkin, and melon; rings of willow splints and of devil's claw for baskets; besides articles of lesser consequence.

In recent years there has been some trade carried on in colored earths and salt with the once hostile Yumas and Mohaves.

From the seventeenth century the Pimas sent well-armed bands through the Apache cordon to trade at the Spanish and Mexican settlements of Sonora. The latter also sent trading parties from Tucson and other towns to barter with the Gileños. Lastly, American traders appeared about 1850, and for many years there have been half a dozen stores on the reservation. These are under bond to limit their profit to a maximum of 25 per cent, though it is supposed that this rule was never enforced until the present year. Some Pimas sometimes try to turn the tables on the traders by offering damp wheat that of course overweighs. More frequently they put a quantity of sand in the middle of the wheat sacks, which are furnished by the trader and not ordinarily emptied when the wheat is brought in. Rarely, the best wheat is put on top and an inferior quality lies concealed beneath.

[a] "These Papagos regularly visit a salt lake which lies near the coast and just across the line of Sonora, from which they pack large quantities of salt, and find a ready market at Tubac and Tucson. Mr. Lathrop, superintendent of the Sonora Mining Company, told me that he had bought some twenty thousand pounds annually from them." (John Walker in S. Ex. Doc. 2, 720, 36th Cong., 1st sess., 1860.) It would seem from this rather extensive traffic that the Papagos did not allow their religious scruples to interfere seriously with trade.

Artifacts

The manufactures of the Pimas were few in number and simple in character. It is interesting to compare the number of implements and weapons that are of wood with those made of stone, as this is a people classed as belonging to the Stone Age. It will be noticed that the articles of stone are of little consequence in point of number as compared with those of wood, but the stone objects are of the utmost importance from a cultural standpoint. The metate admits of no wooden substitute, and without it the full food value of maize could not have been utilized nor could wheat raising have been so readily taken up as an agricultural pursuit. Without the stone ax and knife there could have been little done in wood working; architecture would have been modified; agriculture, dependent upon irrigation, would have been all but impossible. In short, these three simple implements, made by striking one stone against another, have sufficed to transform the Pimas from the slaves of a harsh environment, compelled to rend their prey with tooth and nail, into an agricultural people who adapt the environment to their needs and make some provision, however slight, for the future.

WOOD

Weapons

Bow. First in importance among weapons must be placed the bow and the arrow. Pima bows are simple, undecorated, and not very carefully made. Those which exhibit weakness through splitting or otherwise are bound with fresh sinew in bands which shrink around the arms at the point where reenforcement is needed. Warriors made their bows of mulberry wood[a] obtained in the Superstition and Pinal mountains. A bow that has been long used, especially in successful warfare, becomes a highly prized possession with which its owner is loath to part. The writer was so fortunate as to secure such a specimen (pl. XIII, *a*) which has the graceful compound curve of the conventional bow; it is of mulberry wood and has a neatly twisted, two-strand sinew string.[b] Hunting bows[c] (pl. XIII, *b*) are frequently made of osage orange wood, a material that is now obtainable from the whites along the Salt river. When mulberry wood was not available willow was used, and most of the hunting bows which men as well as boys continue to make for hunting hares and similar small game are of that wood. The primary type of arrow release prevails, the bow being held as in plate VII, *b*.

[a] "The mulberry plays an important part in the domestic economy of the Apaches; the branches are made into bows, and the small twigs are used in the fabrication of baskets." John G. Bourke, Jour. Am. Folk-Lore, III, 210.

[b] Length 1.350 m., width at grip 26 mm., thickness 18 mm.

[c] Length 1.365 m., width at grip 26 mm., thickness 22 mm.

Arrows. The arrows of the Pimas are made from the straight stem of the arrow bush. The Kwahadk's and Papagos sometimes sold arrows of yucca stem to the Gileños, but these were scarcely equal in quality to those made of wood. The hunting arrows[a] (pl. XIII, *c*) have two split feathers, two hand's breadths in length. War arrows[b] have three feathers, less than half as long and slightly curved. All arrow shafts are measured and cut the length from tip of forefinger to nipple of breast of the maker. Both bows and arrows are sometimes stained with the blood of the jack rabbit, and war arrows may be dyed at the ends with the cochineal which makes its home on the Opuntias. The quiver is made of wild-cat skin (pl. XIII, *d*).

FIG. 9. War clubs.

War club. The club was of scarcely less importance than the bow, and it was customary for a portion of each band of warriors to fight with shield and club alone.[c]

Lance. A short sharpened stick was sometimes used by the Pimas, who adopted it from the Yumas and Maricopas after the Spaniards supplied steel heads for the weapon. The sticks were colored red with mineral paint.[d]

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[a] There are eleven hunting arrows in the collection; length 0.785 m., sharpened to blunt points but having neither head nor foreshaft. There are 3 bands of sinew 4 cm. apart, the first at the point. The seizing at the forward end of the feathers is 5 cm. long. The feathers vary from 12 to 22 cm. in length between the seizing at ends. They project 1 cm. from the shaftment. There are 10 bands of sinew very neatly laid on to hold the feathers in place. The notches are 4 mm. deep.

[b] The single war arrow in the collection is unusually long, 0.850 m. It is stained with cochineal for a distance of 0.117 m. from the point. It carries a small obsidian point 2 cm. in length, with the sinew seizing continued from the point 3 cm. along the shaft. The feathers are 0.10 cm. long and project 7 mm. from the shaftment. The butt is stained for a distance of 5 cm.

[c] Bartlett, usually an admirable observer, failed to notice that the war club was a popular Pima weapon. He says: "The only weapon used by these tribes is the bow and arrow. The short club of the Yumas and the long lance of the Apaches I never saw among them." (Personal Narrative, II, 237.) The clubs were made of mesquite root or of ironwood, weighed about 2 pounds, and in general appearance resembled the old style potato mashers of New England kitchens. (Fig. 9.) The handle was brought to a sharp point, which was almost as effective as a dagger in a back-handed blow. The club was carried thrust point downward through the belt. One club was obtained from its owner and another found in a cache of personal property that had been made in the hills at the death of the owner. The former is 42 cm. long, the head 10 cm. long and 9 cm. in diameter; the point is 9 cm. long. A club in the National Museum, (no. 27846) that was collected some years ago at Sacaton is 0.385 m. long, 7 cm. in diameter. Doctor Palmer secured three in 1885 and believed that none remained among the Pimas. These clubs, now in the Museum, are of the following lengths: no. 76023, 48 cm.; 76024, 44 cm.; and 76025, 46 cm.

[d] The collection contains a wooden lance, made from a giant cactus rib, that was carried in sham battles near the Double buttes. It is 1.595 m. long, the larger end colored black to represent the iron head, which is represented as 0.265 m. long, 24 mm. wide, and 10 mm. thick. The handle is stained a light red.

Agricultural Implements

Digging stick. The earliest agricultural implement was the digging stick. It was used in planting maize and other crops, as a lever to pry out bushes when clearing the ground, as a pick when digging irrigating ditches, and in case of surprise it made an effective weapon of defense. It was made of ironwood or from the spiny tree, Zizyphus lycioides.[a] The short handle necessitated a crouching or sitting position by the operator. (Fig. 10, *a*.)

Shovel. Wooden shovels were used to throw out the earth that usually required loosening by the digging stick when constructing the irrigating canal. They were of cottonwood, in the case of the larger, lighter ones, or of mesquite. The handle and blade were in one piece, the former being very short and the latter having the natural curve of the trunk from which it came.[b] (Fig. 10, *b*.)

a *b* *c* *d*

Fig. 10. Agricultural implements. *a*, Digging stick; *b*, shovel; *c*. hoe; *d*, dibble.

Hoe. Another implement of early adoption by the Pimas combined the functions of spade and hoe. It was used to loosen the soil around plants and to cut away weeds. It was made of ironwood and was thin, hard, and heavy. As it was quite short and curved but slightly it could be used only when the workman was in a kneeling or sitting position. It was sharpened along the convex curve at the wider end. The entire implement was so thin that it must have chafed the hands. But one specimen was found on the reservation (fig. 10, *c*).[c]

Dibble. The implement described above was superseded by one obtained from the Mexicans who frequently came to trade with the Pimas. The new implement more nearly resembled the primitive digging stick than it did the flat "hoe" (fig. 10, *d*). It was furnished

[a] No genuine specimen being now obtainable, the writer had a digging stick (fig. 10, *a*) made, which measures 1.140 m. in length. It is 40 mm. in diameter, and is flattened at the lower end.

[b] The old people yet remember how the wooden shovels were made. Whether the Pimas have directly descended from the Hohokam or not, it is very probable that the former have used the same form of shovel that was used by the latter when constructing the great irrigating canals of that region. The specimen figured here (fig. 10, *b*) may therefore be accepted as a representative of the shovel that was probably the instrument that made those canals a possibility. It is 0.850 m. long; the blade is 0.276 m. long and 0.167 m. wide.

[c] It is 0.680 m. long and 0.083 m. wide; the cutting edge is 17 cm. long.

with a steel blade that was straight on one side and rounded on the other.[a]

Plow. Of comparatively modern introduction, the wooden plow is of but passing interest in our present researches. It is a survival of European culture that effectively influenced the Pimas for but one generation, or from 1850 to 1880, when the influx of Americans created a demand for wheat which the Pimas were able to supply in part as they could not have done without this implement. By the end of

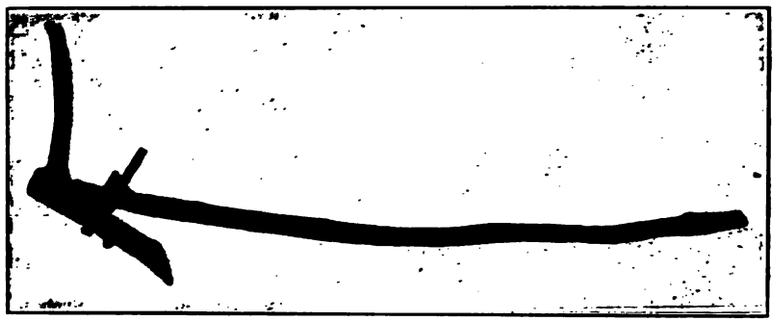


FIG. 11. Wooden plow.

that period they received steel plows. The wooden plow was made of mesquite or ironwood with a cottonwood tongue that extended to the ox yoke. The rear end of the tongue was beveled underneath to an edge which engaged with a transverse notch in the handle. The bottom dragged at a considerable angle, so that the point alone came in contact with the soil. The cutting face was usually supplied with an iron or steel covering resembling the single-shovel cultivator of the Americans. The bottom and single handle were of one piece, the

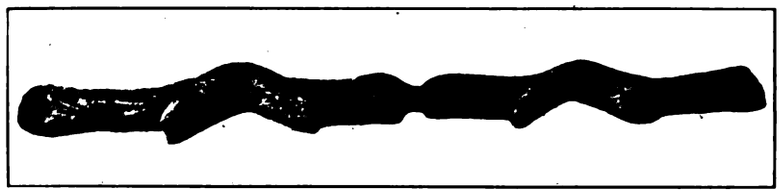


FIG. 12. Yoke.

latter being a branch that set at a convenient angle, about 70 degrees, with the trunk of the tree from which the bottom of the plow was cut (fig. 11).[b] The tongue was held in place by a mesquite pin passing through the bottom and a slot in the butt of the tongue and tightened by two wedges which were adjusted by means of a mesquite mallet carried for the purpose.[c]

[a] Length, 1.090 m.; length of blade, 0.215 m. to top of socket; width, 0.115 m.

[b] Two specimens were collected; only one other was seen or heard of on the reservation. The larger one is complete, with tongue. It is 0.900 m. long; handle, 0.850 m., and tongue 3.490 m.

[c] A mallet in the collection measures 0.380 m. in length and 5 cm. in diameter.

Yoke. With the introduction of cattle the Pimas obtained their first draft animal. They were used principally in plowing and were fitted with yokes (fig. 12) of cottonwood or willow which were attached to the horns of the animals as in southern Europe to the present day. The yokes themselves are the best evidence that the burden upon the animals was light, for these small sticks of brittle wood would snap at the first strain if on the shoulders of an ox team with a heavy load. There are a few yokes yet to be found, though they have not been used for several years. The specimens collected are fairly well made, straight, but with sections hollowed to fit the necks of the team.[a]

Household Utensils

Mortar. Perhaps the mortar should be placed first in importance among the utensils of this class. There are two forms, one (fig. 13, *a*) with the hole sunk in the end of the log, and which may be either sharpened at the other end and set permanently in the ground or cut flat at the opposite end so that it will stand upright and may be moved about. The other style (fig. 13, *b*) lies horizontal, with the hole in the side of the log. This is always portable.[b]

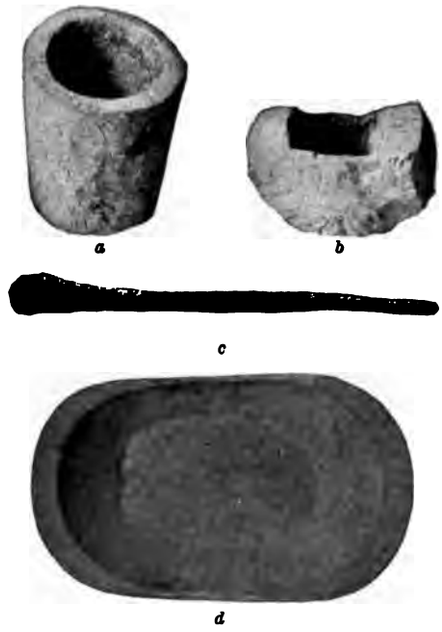


Fig. 13. *a*, *b*, Mortars; *c*, wooden pestle; *d*, bread tray.

Two or three stone mortars, rounded and well shaped, were seen; they had been obtained from the ruins and were little used. At the Double buttes, near the center of the Gila River reservation, there are a few mortar cavities in the solid rock ledges. There is also one in a large bowlder which is regarded with superstitious reverence. Mortars in solid stone are not uncommon in Arizona. The writer saw a row of them at the end of a cliff ruin of eight or ten rooms in Aravaipa canyon. There are several in a rough hillock in Harshaw canyon, Patagonia mountains. The base of the conical hill at Tucson is well

[a] There are two specimens in the collection. The larger is 1.450 m. long; 10 cm. in diameter at the middle, with notches for necks; 30 cm. wide. The second specimen is 1.200 m. long.

[b] The mortar of the horizontal type in the collection is perhaps a trifle smaller than the average. It measures 40 cm. in length, 27 cm. in height, and 22 cm. in thickness. A heavy specimen of this type in the collection measures 37 cm. in height, 32 cm. in diameter; the cavity is 17 cm. deep.

pitted with them. They are occasionally met with almost anywhere in the eastern half of the Territory. With that portion west of the Rio Verde the writer is unacquainted. Reference to the pages devoted to a description of the plants that furnish food for the Pimas will show how extensively the mortar is used in grinding seeds.

Pestle. For pounding up mesquite beans in the mortar a large wooden pestle is sometimes used. It is simply a mesquite club with rounded head (fig. 13, *c*).[a]

a *b* *c*

FIG. 14. *a*, Doughnut fork; *b*, ladle; *c*, unfinished ladle.

Bread tray. Neatly made trays of mesquite, rarely of cottonwood, are used, and appear to be among the most prized of the household utensils (fig. 13, *d*). They are employed for a variety of purposes besides that of mixing bread.[b] Smaller trays and plates—circular, elliptical, and rectangular—are sometimes obtained from the Papagos.

[a] One specimen, the only one seen, was secured. It is 1.210 m. long and the head is 0.335 m. in diameter.

[b] The specimen collected is 0.615 m. long, 0.355 m. wide, and 0.071 m. deep. The legs are 24 cm. long; they are three in number and of the same piece of wood as the body of the tray. There is one round shallow tray, no. 76051, in the National Museum that is 46 cm. in diameter.

Fork. In frying doughnuts it is necessary to have some instrument with which to remove them from the fat. A slender sharpened rod of arrowwood is used for this purpose (fig. 14, *a*).[a]

FIG. 15. Pottery paddle.

Ladle. Ladles are said to be of recent introduction, the Pimas having obtained them from the Papagos, who in turn had derived the art of making them from the Mexicans. They are commonly made of mesquite, though the Papagos make them of paloverde wood. The bowls are not rounded, but are made in the shape of a flattened cone, as they can be more readily worked into that form with a straight-bladed knife.[b]

FIG. 16, *a*. Hanging shelf.

Pottery paddle. A paddle of cottonwood is used to shape the outer surface of pottery. It is hollowed to fit the convex surface of the vessel, and is now frequently made from a barrel stave, which has the proper curvature. The paddles are of varying sizes, according to the sizes of the vessels on which they are used, but the handles are always proportionately short.[c]

Shelves. There is a class of objects that are used indifferently for doors[d] of sheds and houses, for shelves[e] that are suspended in the arbors, and for bird traps.[f] They are usually made of large arrowbush rods, which are quite straight and of uniform diameter. The rods are tied to cross pieces, as shown in figure 16, *a*, or are held by twisted cords of hide, as in figure 16, *b*. The latter specimen was

[a] The specimen collected is 45 cm. long.

[b] The finished specimen in the collection is rather smaller than the average (fig. 14, *b*). It is 0.394 m. long. The bowl is 94 mm. in diameter and 42 mm. deep. The unfinished specimen (fig. 14, *c*) is a large one, measuring 0.570 m. in length. The National Museum contains a specimen, no. 76050, which measures 56 cm. in length, with bowl 15 cm. in diameter.

[c] The collection contains one which is 0.268 m. long and 0.112 m. wide (fig. 15).

[d] The door (fig. 16, *b*) is 1 m. long and 0.850 m. wide. The rods are from 1 to 2 centimeters in diameter and are held by 5 hide strands, 2 at each end and 1 in the middle. The stiffening of the rawhide has warped the upper portion.

[e] The shelf (fig. 16, *a*) is 1.050 m. long and 50 cm. wide.

[f] When used as traps they are tilted at an angle of 20° or 30° from the ground and supported in that position by a short stick to which a long cord is attached. Wheat strewn under the trap lures small birds, which are caught when a jerk on the line removes the supporting stick. One of these traps was seen at nearly every house during the winter of 1901-2.

serving as a door when purchased, and the fact that a "Melicano" wanted it caused its owners great astonishment and amusement. Indeed, the Pimas manifested a lively interest in our purchases of household articles and never failed to laugh at the spectacle presented by the little wagon half buried beneath its load of unassorted objects.

FIG. 16, *b*. Door.

Bird cage. The cages made by the Pimas are all of the same character, whether they are made for the large eagle or for the small Sonora dove, as in the case of the specimen[a] figured (fig. 17). They are of arrowwood, laid up in log-cabin style or tied to transverse bars, as in the house doors.

Kiâhâ frame. It is to be remembered that the peculiar form of carrying basket is made possible by the use of the wooden frame. It is fully described on page 140.

Fire drill. In primitive times fire was kindled by the Pimas by means of a two-part drill (fig. 18, *a*),[b] the simplest and most widespread form of fire drill. The operator knelt upon the ends of the hearth stick and twirled the upright stick between his palms. The hearth was of saguaro wood or of any other soft wood if that were not obtainable. Tinder was not used, the flame being developed in any inflammable material as soon as the smoke began to arise from the dust accumulated at the point of the drill.

FIG. 17. Bird cage.

With the advent of the whites flint and steel were used to kindle fire. The men carried these, with a little cotton for tinder, in leather pouches (fig. 42). Fire was preserved at each village or camp in an old stump whenever practicable.

[a] This specimen has an arched top and a single piece of pine board for a floor. It is 32 cm. long by 23 cm. wide and 15 cm. high.

[b] The drill hearth in the collection is 0.315 m. long and 21 mm. wide. The spindle is 68 cm. long and 9 mm. in diameter.

MISCELLANEOUS

Saguaro hook. The fruit of the giant cactus grows at so great a height[a] that it can not be reached without the aid of some long-handled implement for dislodging it. Hooks[b] are made by attaching, by means of maguey fiber, a straight piece of wood to the end of a long cactus rib. Doctor McGee has called the writer's attention to the fact that the angle at which the hook stands is of great ceremonial importance among the Papagos, but there would seem to be no significance attached to it by the Pimas, who have not been so dependent upon the cactus in the past as have their nomadic neighbors.

Tweezers. The spiny fruit of Opuntia arborescens is picked by means of willow tweezers (fig. 18, *c*). The arms are flexible and sufficiently elastic to spring back into place readily.[c]

Tree. It was formerly the custom to erect a branched post in the space before the house door, on which to hang vessels or bags containing food. Of late a few (three were seen) "tree animals" are set in the ground near the buildings to serve as seats and for the children to play upon. They are sections of mesquite trees that have each a branch perpendicular to the plane of the trunk at a point where the latter bends in the opposite direction slightly, so that when the branch is set in the ground the trunk is horizontal with the exception of the end which curves upward in a manner somewhat resembling a vaulting horse.

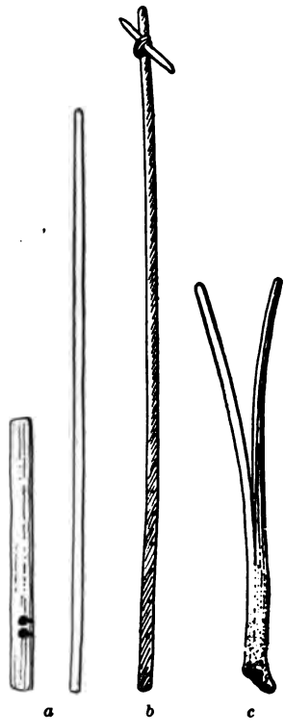


FIG. 18. *a*, Fire drill; *b*, saguaro hook; *c*, ha'nûm tweezers.

Cradle. The frame of the cradle is of willow, in the form of a narrow bow with from 5 to 10 cross bars (fig. 19, *a*). It closely resembles the Mohave trellis frame, but is more rudely made.[d] The frame was formerly covered with shredded willow bark to a depth of 3 or 4 inches and a bit of cotton cloth covered the whole. Now the willow bark is not so thick, and much more cloth, no longer of native make, is used. The cradle (fig. 19, *b*) is provided with a detachable

[a] See pl. IX, *a*, where the saguaro appears in flower in the background.

[b] The specimen illustrated in fig. 18, *b* was cut short for convenience of carrying. The handles vary in length from 2 to 5 m. The hook is 165 mm. long and 8 mm. in diameter.

[c] The specimen collected is 31 cm. long; natural spread of jaws, 55 mm.

[d] See Mason in Report National Museum, 1894, 524.

hood made of willow bark in the checker style of weaving, the surface being ornamented in geometric patterns colored black and red. Over the hood a loose piece of cloth may be thrown to protect the occupant from flies. The babies when strapped closely in the cradles are frequently carried on the heads of their mothers, who may at the same time have no insignificant burdens in their hands. When the children are about a year old they are carried astride the hip, unless upon a journey, when they are shifted around to the back, still astride,[a] and there supported by a shawl or large cloth bound around the waist.[b] The writer has seen women with children of 2 or 3 years on their backs, each carrying a sack of wheat on her head and lighter bundles in her hands.[c]

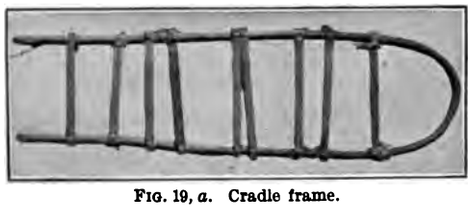


FIG. 19, *a*. Cradle frame.

Paint brush. The lines of pigment with which the face was formerly ornamented were applied by means of slender bits of arrowwood two or three inches long. The Kwahadk's were accustomed to gather the tufted ends of the arrow-bush branches and carry them southward into Papagueria to be used as paint brushes.

FIG. 19, *b*. Cradle.

Calendar sticks. The Pimas keep a record of passing events by means of sticks carved with arbitrary mnemonic symbols. There are five such records in the tribe to-day—or were a year ago. The oldest of these sticks bears the history of seventy years. There were other sticks before these, but the vicissitudes of war, fire, and the peculiar burial customs of the people made away with them.[d] There are three sticks in the collection, which have been designated Gila Crossing, Blackwater, and Casa Blanca calendars,[e] from the names of the villages whence they came. The Casa Blanca stick (fig. 20, *a*) is of willow, peeled,

[a] Doctor Palmer says that as soon as a child is old enough to stand alone the mother carries it on an immense cincture of bark worn on her back. The author saw no such cinctures in use and believes that their use has been abandoned.

[b] Mason, Cradles, in Report National Museum, 1887, 184.

[c] The frame of the cradle figured is 67 cm. long by 20 cm. wide. The hood is 38 cm. high.

[d] See p. 35. They are mentioned here merely for the purpose of describing the sticks as products of the woodworker's skill.

[e] The Casa Blanca calendar is not recorded in "The Narrative," p. 38.

slightly flattened, but otherwise bearing no signs of preparation for the symbols that occupy the greater part of one side.[a] The Gila Crossing calendar (fig. 20, *b*) is a pine stick on which the record was copied several years ago from a stick yet in the same village. The record begins on the back, passes over the lower end in the figure, and extends again to the back over the upper end.[b] The Blackwater stick (fig. 20, *c*) is of saguaro wood smoothed and carved for the writer by the keeper of the record, who lost the original some years ago and who has since been using paper and pencil, but the same symbols.[c]

a *b* *c*

FIG. 20. Calendar sticks. *a*, From Casa Blanca; *b*, from Gila Crossing; *c*, from Blackwater.

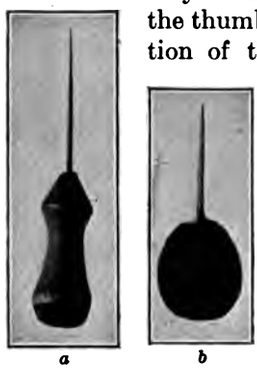
Spurs. Wooden spurs were made from crotched limbs of mesquite of suitable size. They were attached to the foot by a deerskin thong fastened to form two loops of equal size, one passing over the instep and the other under the heel of the foot. So rare have they now become that the writer spent six months on the Gila River reservation without discovering any, and therefore hired an old man to make a pair for the collection. Soon afterwards a single old spur was found, which differs from those made to order only in having deerskin instead of maguey fiber fastenings (fig. 21).[d]

FIG. 21. Wooden spur.

Saddle. Wooden saddletrees are sometimes made, both for riding and pack saddles. The former are covered with rawhide, shrunk on, and provided with stirrups of mesquite or willow wood. They are not common and are at best but crude imitations of the saddles made by the whites. Saddle blankets for use with them are of matted grass or maguey fiber.

[a] Length, 93 cm.; diameter, 16 mm.
[b] Length, 96 cm.; diameter, 18 mm.
[c] Length, 1.395 m.; diameter, 20 mm.
[d] Length, 0.152 m.; spread across fork, 9 cm.

Awl. There would seem to be no tradition of the former use of bone awls among the Pimas. They declare that awls of mesquite wood were used in making baskets before the introduction of steel. At present the points are of pieces of umbrella rib set in wooden handles of native manufacture (fig. 22, *a*).[a] It will be observed that the upper end of the handle is provided with a button, so that it may be held between the third and fourth fingers while the thumb and other fingers are engaged in the manipulation of the basket splints. Handles of round balls of creosote gum[b] are also used (fig. 22, *b*).[c]



a *b*

FIG. 22. Awls. *a*, Wooden handle; *b*, gum handle.

Rope twister. This apparatus is probably of European origin. It consists of a pin or handle of hard wood, such as mesquite or willow, which is thrust through a hole near the end of another stick, which acts as a spindle whorl. The latter piece has a button at the short end, to which are attached the maguey fibers or horse hairs (fig. 23). The operator, by a slight rising and falling motion of the handle, causes the spindle to revolve rapidly, thus twisting the fibers into a cord which lengthens as he steps backward. A second person meanwhile adds fresh fibers to the other end.[d]

Â'mĭna. Among the most important of the sacred objects in the paraphernalia of the medicine-men were the â'mĭna, or medicine sticks. They are usually of arrowwood; always bound together with cotton twine of native spinning, either with or without feathers attached to each separate stick. There are six â'mĭna bundles in the collection. One was made by Kâ'mâl tkâk, to be used exclusively in the exorcism of the Tcu'nyĭm, a spirit of disease. The bundle contains four groups of sticks: Two pairs, one bundle of 4, and one of 6. All are plain, being unmarked in any way (fig. 24).[e]

FIG. 23. Rope twister.

[a] Length of specimen (fig. 22, *a*) 0.103 m., of which 56 mm. is handle.
[b] Deposited on the branches of the creosote bush by the minute scale insect, Carteria larreæ.
[c] Length, 3 cm.; diameter of handle, 24 mm.
[d] Length of pin, 0.254 m.; diameter, 8 mm.; length of spindle, 32 cm.
[e] Length, 0.167 m.; diameter, 6 mm.

The second bundle is painted green. Each stick is whittled to a blunt point at one end and has two short, downy turkey feathers attached (pl. XIV, *b*).[a]

The third bundle contains two sets of 4 sticks each, which were originally painted blue. They are sharpened to tapering points at one end. To each stick is tied two of the tail feathers of some small bird (pl. XIV, *a*).[b]

FIG. 24. Â'mĭna with reed cloud blower and attached feathers.

The fourth bundle contains three sets of 4 sticks each and the remains of another set which probably contained 4, though it is so old that it is in a fragmentary condition (pl. XIV, *d*).[c] A bundle of feathers attached by strings is bound in with the â'mĭna, each one of which also bears two feathers, all the feathers being from a red-colored bird.

The fifth bundle contains three sets of 4 sticks each, but they are so old and broken that their original length can not be determined. They also have red feathers bound to them (pl. XIV, *c*).

The sixth bundle is very small and very old and it is probable that the unusual number of sticks—5—is due to the fact that a portion of the bundle has crumbled with age (pl. XIV, *e*).

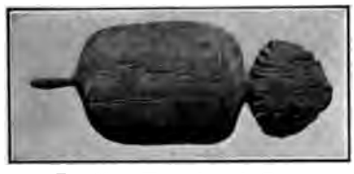


FIG. 25, *a*. Horned toad effigy.

Animal effigies. Wooden images of reptiles and the like are used in the medicine-men's efforts to cure certain diseases. Two such specimens were collected. One is intended to represent a horned toad (fig. 25, *a*),[d] the other a lizard (fig. 25, *b*).[e] They are either carelessly or clumsily made.

Mask. During his stay among the Pimas the writer heard of but two wooden masks being in their possession. One of these was collected and is here depicted in figure 26.[f] Doctor Hough called his attention to the fact that it resembles those made by the Yaquis of Sonora, and it

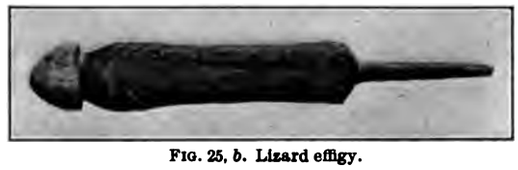


FIG. 25, *b*. Lizard effigy.

[a] Length, 0.155 m.; diameter, 21 mm. The feathers are a trifle shorter than the sticks.
[b] Length, 0.136 m.; diameter, 10 mm.
[c] Length of sticks, 17 cm.; diameter, 7 mm.
[d] Length, 10 cm.; width, 42 mm.
[e] Length, 28 cm.; width, 4 cm.
[f] Length, 0.208 m.; width, 0.153 m.

is probable that the conception, if not the mask itself, was imported from the southward along with the masked Navitco ceremonies, despite the assertion of its former owner to the contrary, because it represents a higher degree of skill in woodworking than any piece of carving that the writer has seen done by a Pima. It is of cottonwood, perforated for the insertion of horsehair eyebrows, chin whisker, and two tufts on the center of each cheek, and is ornamented by an interrupted scroll and other lines unmistakably intended to be decorative. The mouth contains a half dozen pegs, giving a very realistic representation of teeth.

FIG. 26. Navitco mask.

Wand. There are two wands or ceremonial sticks in the collection (fig. 27).[a] The longer is of greasewood, Sarcobatus vermicularis, the material prescribed for ia'kita, or ceremonial paraphernalia of this class. It is spotted with black and red paint. The shorter wand is of willow, spotted with red. Both were made to be held in the hand during ceremonies intended to bring rain, to cure disease, and for kindred purposes.

STONE

METATE

The metate is the most abundant of the stone implements of the Southwest, or, if arrow points exceed them in numbers, the former is at

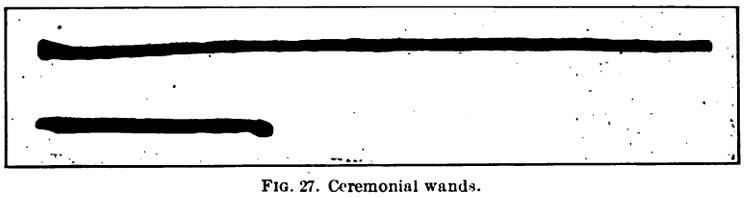


FIG. 27. Ceremonial wands.

least the most noticeable. About nearly every ruin one sees the fragments of broken metates, in some cases to the number of several score, as at the ruin near Patagonia, in the Sonoita valley, where sixty

[a] Length of the longer figure, 76 cm.; of the shorter, 28 cm.

metates were counted on the ground (every one had been intentionally broken), and there must have been a much larger number beneath the surface. Some of those found in the Hohokam ruins are of lava and have legs several inches in length. Most of these are hollowed out, as are those of the Hopis, whereas the metates of the Pimas are

FIG. 28. Grinding wheat on metate.

perfectly flat on the top from side to side, being slightly concave form end to end (fig. 28). They are of coarse-grained rock from the surrounding hills and never carved or provided with legs. They vary in weight from 20 to 200 pounds and are carried about the premises as needed, never being set in bins, as among the Pueblo tribes. Their grinding surface is sharpened or roughened by pecking with a stone ax, or with a similarly shaped stone if an ax is not obtainable.

MULLER

The muller is of lava or of stone similar to that of the metate itself. It is longer than that used by the Hohokam, so that the entire upper surface of the metate is worn down. It is not shaped into a rectangular bar, as is that found in the ruins. Indeed, the writer saw few that showed any evidence of having been shaped in any manner except through use.

FIG. 29. Stone pestle.

PESTLE

The stone pestle[a] is used in every Pima household to crush the mesquite bean and other seeds in the wooden mortars. The pestle varies in size from the small stone the size of one's finger to the great

[a] An average-sized specimen in the collection weighs 4½ pounds; it is 253 mm. long and 76 mm. in diameter (fig. 29).

cylinder weighing 20 pounds that requires both hands to wield it. Many of these are obtained from the ruins, but some are shaped by pecking. This is not all done at once, but, a suitable stone having been selected, it is shaped little by little, day by day, as the owner has leisure for the work. This suggests that much of the stonework of primitive peoples which excites our admiration for their patience has been done in this manner, the implement being in use continually and the task of pecking it into more convenient or more pleasing shape being taken up from time to time as "knitting work."

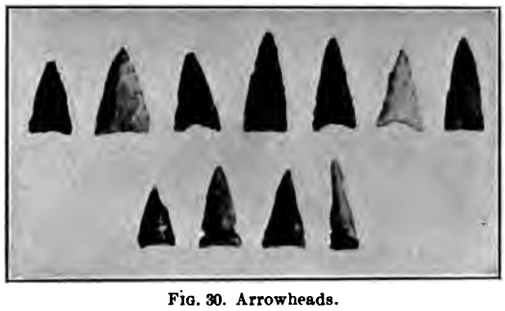


FIG. 30. Arrowheads.

Ax

The stone axes of the Pimas were obtained from the ruins that are far more extensive than the Pima villages in the Gila and Salt River valleys. Most of these axes have each a single blade, many are double-bitted, and some are of the adz form. Others are so large and finely polished as to render plausible the supposition that they were intended for ceremonial use. All are of hard, fine-grained igneous rock called hatovĭk by the Pimas, some of whom assert that the material comes from near the Gulf of California, where they have seen it when on journeys after salt. Others declare that there is no such stone on the surface of the earth, and that all the axes we find now were made from material that was brought from the underworld when Elder Brother led the nether-world people up to conquer those then living above. However, no particular religious significance is attached to the axes, as might be expected, considering their origin. They are sold readily enough, though when a suitable ax is kept for sharpening the metate of the household it is sometimes difficult for a collector to secure it. There is an abundance of suitable stones along the Salt river below where it breaks through the Superstition mountains, and it is probable that all the axes in the valley were obtained from that immediate locality. The few that were seen hafted were fastened with sinew in the fork of a limb of suitable size.

FIG. 31. Arrow-shaft straightener.

Arrowheads

A great portion of those used by the Pimas were made by the Hohokam. However, the Pimas always had a few arrowhead makers who worked in obsidian, shale, or flint. They produced small heads varying from 1 to 2½ cm. in length by 1 in breadth. Those represented in figure 30 are old points. The heads are stemless, sometimes having shoulders for the sinew seizing. One man was found who continues to make arrowheads, which he sells to the whites.

Arrow-shaft Straightener

The Pimas had very little need for grooved stones for straightening arrows as the arrowwood is naturally as straight as could be desired. It is probable that the stones of this kind found in the ruins were used merely for polishing. The Pimas used them scarcely at all.[a]

Hammer Stones

These are frequently seen around the ruins of Arizona, but the Pimas seem to have little use for them.

Fig. 32. Crystals from medicine basket.

Firestones

Three stones, each about 15 cm. in diameter, were used to support the cooking pots over the fire. They have been largely supplanted by an iron frame obtained from the agency blacksmith. These stones were picked up when needed and little effort made to preserve them.

Crystals

Crystals and curiously shaped stones of all kinds were preserved in the outfits of the medicine-men. Several such specimens were purchased and some were found in a cache among the hills (fig. 32).[b]

---

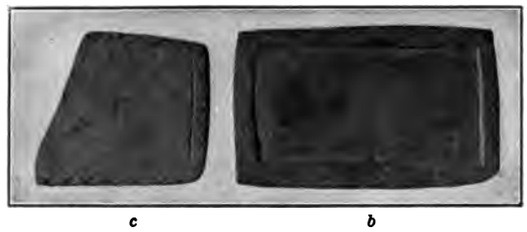
[a] A specimen (Hohokam) in the collection (fig. 31) has been shaped to represent some animal (?). It is 92 mm. long and 60 mm. wide.

[b] Compare Cushing: "In this connection it is interesting to add as of possible moment suggestively that associated with the ultra mural remains [in the Salt River valley], both house- and pyral-, were found small, peculiar concretion-stones and crystals evidently once used as personal fetiches or amulets, as is the case at Zuñi to-day." Congrès International des Américanistes, VIIme sess., 1890, 179.

Magic Tablets

The collection contains two tablets which were obtained from medicine-men and half of one which was found in the cache above referred to (fig. 33, *a*, *b*, *c*). Two have ornamental borders, while the third is quite smooth to the rounded margin; it has the figure of a horse scratched on one side and that of a man on the other.[a]

a



c *b*

Fig. 33, *a*, *b*, *c*. Magic tablets.

Turquoise

This stone, which is so common in some parts of the Southwest that every Indian has it hanging from ears, neck, or arms, seems to be rare in Pimería. But one pair of ear pendants was seen. It was somewhat more abundant in early days. It was believed that if a man lost a turquoise the mishap was due to magic, and as a result he would be afflicted with some mysterious ailment which could be cured only by a medicine-man skilled in the cure of the "doctor's disease." He would use another piece of turquoise or a slate or a crystal, placing the stone in water and giving the latter to the patient to drink.

Pipe

A stone cylinder (fig. 34),[b] probably a pipe, was obtained from a Pima, who said that he had "found it long ago." It seems short for such a purpose, yet it is longer than a cane cylinder the writer found in actual use. The smoke is blown outward in certain ceremonies and in others drawn in. These tubes were also used by the Pimas in sucking and blowing the bodies of the sick for the purpose of expelling disease.

Fig. 34. Stone pipe.

[a] The last tablet is 122 mm. long by 56 mm. wide; it is 6 mm. thick at one side and tapers to 2 mm. at the other. The largest specimen is 151 mm. long by 94 mm. wide and 10 mm. thick; the border is 10 mm. wide, marked thus: XXXX. The broken specimen is 87 mm. wide; its length can not be determined. The X pattern at the margin runs over to the surface of the reverse side.

[b] Length, 48 mm.; internal diameter, 16 mm.; maximum external diameter, 26 mm.

FIBER AND LEATHER

Saddle

In addition to the wooden saddletrees already mentioned the Pimas made them each of two rolls of grass or straw, inclosed in blue denim or canvas and bound with a network of rawhide. A specimen[a] in the collection (pl. xv, *a*, *b*) has two such rolls fastened together with both horsehair and maguey cords. The top is covered with leather taken from two old boot legs. One stirrup is wanting; the one that remains is of native manufacture. The accompanying cinch (pl. xv, *c*)[b] is of horsehair neatly twisted and quite strong and serviceable. When used, it was passed over the saddle instead of being attached to it. A Pima is rarely seen riding bareback, and most have good saddles of American manufacture. Bartlett states that those who rode bareback at the time of his visit in 1850 thrust one foot under a loosely fastened surcingle.[c]

Saddlebag

A coarse net of maguey fiber is made to carry bulky objects upon either pack or riding saddles. The fibers are twisted into two strands, which are united to form a rope 5 mm. in diameter; with this the meshes are made about 12 cm. in length by an interlocking knot of the simplest character. The bag in the collection is about 1 m. in length (fig. 35).

Fig. 35. Saddlebag.

Head Rings

The round-bottomed water jars and many similar heavy burdens besides were borne upon the heads of the women with the aid of the rings of willow bark in the early days, and now with rings of rags wrapped with cotton cloth.[d] Of less common use are the agave-leaf rings, which should be classed as twined basketry.[e] They are

[a] Length, 60 cm.; diameter of rolls at the middle, 10 cm. They are thickened slightly at the ends to form pommel and cantle.

[b] Length, 75 cm.; width, 7 cm.

[c] Narrative, II, 237.

[d] The bark head ring (fig. 36, *a*) is 155 mm. in diameter and the opening in the center is 42 mm. in diameter.

[e] Diameter of specimen collected, 10 cm.; height, 165 mm.

folded at each margin so that a ring is made up of three thicknesses of matting. This ring is smaller than the other types and is used for lighter burdens (fig. 36, *b*). Almost any cloth (fig. 36, *c*) may be improvised into a head ring, and aprons are especially convenient for such use.

a *b* *c*

FIG. 36. Head rings. *a*, Willow bark; *b*, agave leaf; *c*, cloth.

ROPE

Picket ropes of maguey fiber (figs. 37, *b* and 38) are brought by the Papagos to trade to the Pimas. They are about 10 m. long and 1 cm. in diameter, made of four 2-ply strands. They are strong, but

a *b*

FIG. 37. *a*, Horsehair halter; *b*, maguey rope.

the harsh and coarse fiber renders them disagreeable to the touch of any but a hardened hand. The prepared fibers for rope making in this collection measure 60 cm. in length. With such material and a rope twister the process of manufacturing rope is a rapid one.

Human hair is both twisted and braided into cords for tightening kiâhâ frames. The cords are usually made of four strands of 2-ply twisted threads. They are about 5 mm. in diameter when finished.

Halters

Horsehair is quite popular as a material for the manufacture of halters. The halter here illustrated (fig. 37, *a*) has a loop of light cord, 45 cm. in length, to be passed over the horse's head. The rope

Fig. 38. Maguey fiber.

has a loop 26 cm. long that passes over the nose. The length of the rope from the knot of this loop is 3.150 m. It is of four strands of 4-ply threads, one of the strands being white.

Bridles

Bridles are also made of horsehair, vicious looking bits being sold by the traders for them.

Fetish

The collection contains a fetish (fig. 39, *a*) and a hair ornament made of seven wing feathers of a hawk (fig. 39, *b*) which have been joined by laying a strip of cotton cloth on the quill of each feather

and binding it there with sinew, then braiding the loose ends of the strips together into a cord 15 cm. long. In this way the feathers are permanently fastened to one another and may be easily attached when it is desired to wear them as a fetish, or they may be readily attached to the hair to form a portion of the headdress.

War Headdress

At Gila Crossing we were so fortunate as to secure a specimen of an old Pima headdress made from the hair of an Apache and the wing feathers of three species of large raptorial birds (fig. 40). The hair is about 45 cm. long and is gathered in strands 1 cm. in thickness, which are held by two strips of cotton that are twisted or twined on each other a half turn between each pair of hair strands.[a] Viewing the headdress from the rear there are on the left four owl feathers, symbolizing keenness of vision by night; next are three hawk, then one owl, and again hawk feathers to the number of five, symbolizing keenness of vision by day; on the right are two eagle feathers, the symbol of swiftness. Thus the wearer of this headdress possessed the courage and cunning of the hated enemy, the keen sight by day and by night of the birds that have great magic power, according to Pima belief, and the swiftness as a trailer of the king of birds, which occupies a prominent place in Piman mythology.

a *b*

Fig. 39. *a*, Fetish; *b*, hair ornament.

Hairbrush

Using their fingers as combs, the women become very skillful in straightening out tangled locks. They frequently smooth the hair with a brush which was formerly made of the roots of the "Sacaton grass," Sporobolus wrightii (fig. 41, *a*),[b] but as this no longer grows along the river, where the majority of the villages are situated, they now make use of maguey fiber, Agave lecheguea, Yucca paccata, etc. (fig. 41, *b*).[c]

[a] The general use of human hair for cords and in headdresses by the Pimas suggests Lower Californian affinities, as we are told by Venegas that the natives of that peninsula were accustomed to adorn themselves on ceremonial occasions with "a large cloak covering them from their head to their feet, and entirely composed of human hair." History of California, I, 99.

[b] Length of specimen figured, 22 cm.; diameter, 37 mm.

[c] Length of specimen figured, 17 cm.; diameter, 18 mm.

These fibers make very satisfactory brushes, but they are not so stiff as brushes made of bristles. The fibers are not set in a handle but are tied in a round bundle a little below the middle, then folded outward from the center so that the upper end or handle is round and smooth while the lower end includes all the free fiber ends. Twine is then wrapped in a coil around the upper end downward until the brush end remains just long enough to give the fibers play in passing through the hair. The wrapping may be either of fiber or of horsehair; in the latter case pleasing geometric patterns are often worked out with contrasted black and white threads. The specimen illus-

FIG. 40. War headdress.

trated in figure 41, *b* is bound with maguey fiber which has been decorated with three lines of purple dye, put on after the wrapping has been completed.

SKIN DRESSING

The use of leather in the manufacture of clothing was reduced to a minimum among the Pimas. For sandals, rawhide sufficed, and if this was not to be had there was an abundance of yucca fiber, which made a fair substitute. For the shields, with the use of which they became adept through training from childhood, rawhide was employed. So the needs which dressed leather alone could satisfy were but few,

and it is probable that Gileño women did little more than enough skin dressing to keep the art alive among them. At present there are very few who know anything about it, and this is the method which they say "long ago make it."

b a

FIG. 41. Hairbrushes. *a*, Sacaton grass roots; *b*, maguey fiber.

A skin was soaked in water for two or three days to soften it; then it was laid on an inclined log and the hair scraped off with a deer's rib. Two tanning media were used—brains and saguaro seeds. The former were kept dried into a cake with dry grass until they were needed, when they were softened in water. The seeds were available at any time, as they were always kept in store as an article of food.

The roots of the plant known as urto, Krameria parvifolia, were used to dye leather red.

FIRE BAG

Leather bags were used to carry flint and steel, and a specimen of these comparatively modern articles is shown in figure 42. It is ornamented with tin bangles and glass beads.

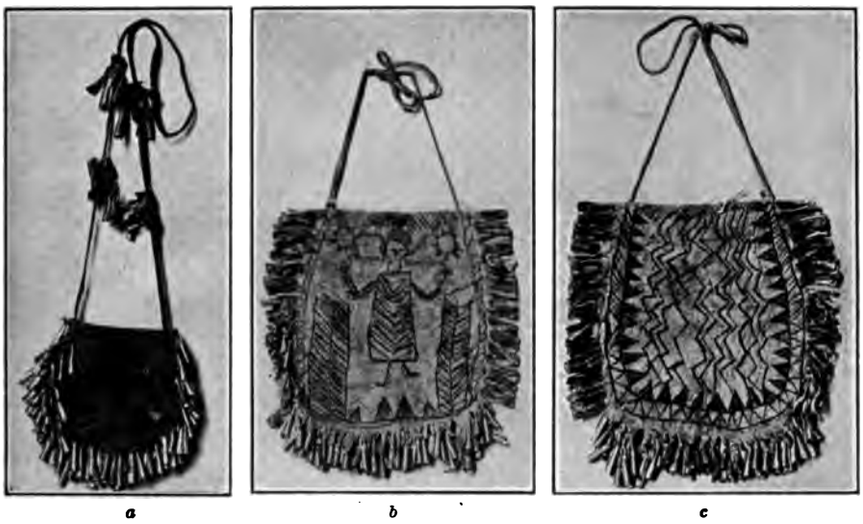
FIG. 42. Fire bag.

TOBACCO POUCHES

Tobacco was not recognized by the Pimas as a narcotic that would stunt the growth in youth or injuriously affect the heart as age advanced, nor yet as a solace for leisure moments. It was to them a plant of divine origin that in its death (burning) released a spirit (odor and smoke) that was wafted by the breeze to the home of the magic beings that shape man's destiny. Throughout Pimería one may find sacred places where large numbers of cane cigarettes have been deposited by worshipers. It is uncertain how far this form of

cigarette was in use by the Pimas. Most of those found were made by the Hohokam.[a]

To carry this sacred powder it was necessary to have something more than an ordinary receptacle, and so pouches were made of buckskin, ornamented in vivid colors with symbols of the sun and provided with rattles that tinkled with every motion of the wearer. Both in shape and in ornament they closely resemble the tobacco pouches of the Apaches. There are two specimens in the National Museum. No. 27840 (fig. 43, *a*) is of buckskin,[b] doubled so that the opening of the pouch on the unornamented half is covered by the fold. The margin is ornamented by a fringe of short strings of buckskin passed through holes along the edge of the pouch, most



a *b* *c*

FIG. 43, *a*, *b*, *c*. Tobacco pouches.

of them having cylinders of tin, slightly bell-shaped, arranged in pairs and pinched into place around the thongs by pounding. The front bears a conventional symbol of the sun in red and blue. There is a short loop with which to suspend the pouch from the belt or to hang it up when not in use.

Another pouch, no. 27839 (fig. 43, *b*, *c*), is of soft deerskin, with a red fringe made by parallel cuts along the edge. There are a few

[a] At the present time most men and some women smoke cigarettes rolled in corn husks or paper, obtained, as is much of the tobacco, from the whites. The native tobaccos are: Nicotiana trigonophylla, known as vi'opal vi'ofû, "like tobacco," gathered near Baboquivari by the Papagos and brought to the Pimas; N. bigelovii, known as pan vi'ofû, "coyote tobacco," and N. attenuata, called rsukai AU'tcâ vi'ofû, "under-the-creosote-bush tobacco." Boys learn to smoke at an early age, though the use of tobacco is not encouraged. The father's favorite saying in reply to a request for tobacco is, "I will give you some when you kill a coyote."

[b] Length, 10 cm.; width, 11 cm.; 114 bangles.

tin bangles at the bottom. The margin is ornamented inside the fringe with a herring-bone pattern burned on. One side of the pouch has a human figure and the other bears two sun symbols. These are very similar to some seen by the writer upon the walls of caves in the Chiricahui mountains, an old Apache stronghold.[a] The pouch is sewed with cotton thread and secured at the top by an American button. The cord for suspension has 4 clusters of 6 bangles each upon it.

Sling

Slings were used by Pima youths before the advent of the whites. They were of the usual elongated oval shape. The National Museum contains a sling, no. 76031, that was obtained from the Pimas half a century ago. It is of leather, probably cut from a boot leg, with strings 68.5 cm. long. The imperforate center is 18 by 7 cm. (fig. 44).

Fig. 44. Sling.

Shield

The fighting men were divided into two parties—those who used the bow and those who fought with club and shield. When advancing upon the enemy, the warrior crouched so that the comparatively small shield protected his entire body. He also leaped from side to side for the double purpose of presenting a more difficult target, and of bewildering the enemy and thus unsteadying their nerves through the suggestion of magic, which plays a larger part in the warfare of the American Indian than is generally known. The preparation for a war expedition is an invocation to the gods and the ceremonies during the journey are incantations for the development of magic power that shall not only render the party invincible but shall induce its magic power, on its own account, to overwhelm the magic power of the enemy. It is not the strength nor the intelligence of the Apache that they fear, nor his arrow with its sting, but his magic—a creation of their own imagination. And so the shield, with its magic symbols in brilliant colors, is kept in rapid motion not only from side to side but also revolving by the reciprocal twist of the bearer's forearm.

A long and careful search failed to disclose the presence of a single old shield among the Pimas, but there is a specimen in the National Museum, no. 27830, that was obtained several years ago (fig. 45, *a*, *b*). It is a rawhide disk 49 cm. in diameter, provided with a cottonwood

[a] Length, 17 cm.; width, 16 cm.

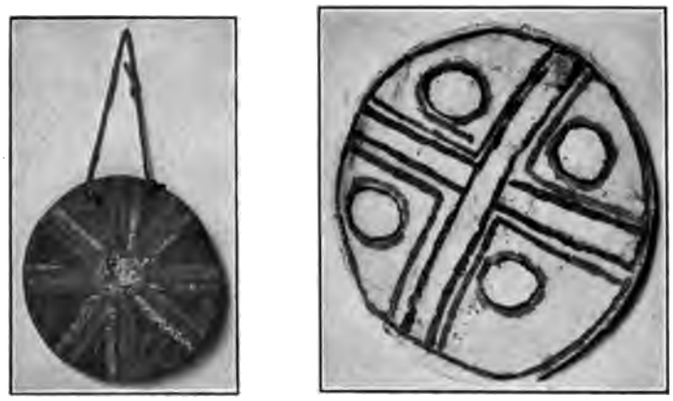
handle of convenient size for grasping. The handle is slightly concave on the side next to the shield. It is attached by means of thongs, which pass through two holes for each end of the handle, at the center of the disk. When not in use, it was carried by a sling strap that

a *b*

FIG. 45. *a*, Shield; *b*, reverse of shield.

passed through two holes at the border 24 cm. apart. It is ornamented by an ogee swastika in blue, red, and white.

There are also two models of Pima shields in the National Museum. One is a small painted disk of rawhide; the other is a hoop with



a *b*

FIG. 46, *a*, *b*. Models of shields.

muslin stretched over it. The former, no. 76073 (fig. 46, *b*), is ornamented with a cross in white, blue, red, and yellow. The latter, no. 76028 (fig. 46, *a*), is 225 mm. in diameter, or about one-third the full size. The design in red and yellow is also in the form of a cross.

A similar shield decorated with swastika in red and white (fig. 47) was collected in 1887 by Mr F. W. Hodge, of the Hemenway Expedition, and by him presented to the Free Museum of the University of Pennsylvania.

Sandals

Some protection for the feet was necessary when on journeys across the stony mesas and mountains that surround the Pima villages. Rawhide was the most widely used material and the sandal was the form of foot gear. It was kept in place by a single thong, which passed through two holes in the front of the sandal, so as to go between the first and second and the fourth and fifth toes, then backward obliquely across the foot, so that the two parts crossed each other over the instep, down through a hole in the end of a heel plate and around behind the heel, where it was doubled back and forth two or three times before passing through the hole in the opposite end of the heel plate, and so on forward again. The heel plate passes transversely through two longitudinal slits in the heel of the sandal and is of the same hard and stiff rawhide. The doubled thongs behind the heel are usually wound with softer material to prevent chafing (fig. 48).

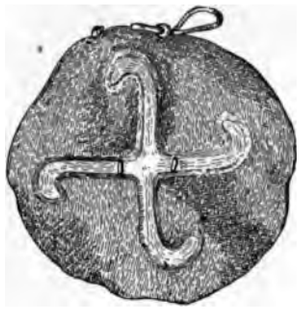


Fig. 47. Shield.

Yoke Straps

Ox yokes were bound to the horns of the animals by long strips of hide that had been roughly dressed without removing the hair. The two straps collected were the only ones seen. It is some years since they were last used for this purpose, and it is not surprising that most such straps should have been employed for other needs (fig. 49).

Fig. 48. Sandals.

Lariat

The use of the lariat was, of course, learned from the whites and was developed gradually with the tardy introduction of live stock. The "rope," as it is universally known in the Southwest, is of rawhide

made in a 4-ply braid, rounded by pounding when wet. The slip noose at the outer end is supplied with an ingenious loop made by folding a heavy piece of rawhide three or four times and bringing the ends together to form an oval ring. The end of the rope is passed through a longitudinal slit in one end of the ring and by a braided enlargement prevented from being pulled out again. A strip of rawhide about 1 cm. in width is rolled in the interior of the ring, and passing through a transverse cut close to one end it is continued around the outside, being itself slit where the rope enters the ring, and also passing under two loops made by catching up the outer layer of hide on the ring it then passes through a transverse slit in the outer and overlapping end of the ring and is knotted. It therefore passes twice around the ring and is the only means of uniting the ends of it. When hardened the ring is large enough to permit free play of the rope through it.[a]

FIG. 49. Yoke straps.

FIG. 50, *a*. Horned toad effigy, of deerskin.

HORNED TOAD EFFIGY

Among the most highly prized objects made of leather by the Pimas, found by the writer, was a life-sized effigy of a horned toad. It is of deerskin, ornamented with white beads, as shown in figure 50, *a*. It was used in the cure of the toad disease by being passed over the affected part. This act and the singing of the toad songs effected a complete cure, our informant believed. Figure 50, *b*, is a photograph of a living horned toad.

[a] Length of lariat, 13.93 m.; diameter, 9 mm. Length of loop ring, 6 cm.; width, 4 cm.

POTTERY

As a tribe the Pimas are not skillful potters. Their work is decidedly inferior to that of the Kwahadk'ṣ, which in turn appears to be improving as a result of a modern demand for it. It is probable that the best potters among the Pimas are of Kwahadk' descent, or have learned the art from that tribe. A great part of the Pima ceramic ware is plain and undecorated. The cooling ollas in which water is kept about their homes are the only vessels that are generally decorated. The potters aver that the designs are copied from the Hohokam potsherds that bestrew the mesas and that the symbolism is absolutely unknown to them. Furthermore, many of the smaller decorated pieces are traded from both the Kwahadk'ṣ and the Papagos, the latter bringing them filled with cactus sirup to exchange for grain. The vessels here illustrated were made by Sala Hina (fig. 51), one of the best potters on the Gila.

FIG. 50, *b*. Living horned toad.

MATERIAL

The common ware that is intended to be subjected to heat is generally made from clay obtained among the Skâsŏwalĭk hills, which lie on the southern border of the Gila River reservation. The material is a dry granular clay combined with quartz pebbles and feldspathic detritus. The place where it occurs looks much more like a stone quarry than like a clay pit (pl. XVI, *a*). Indeed, a great part of the mass is sharp, angular stone, which must be winnowed out by hand in the shallow baskets.

FIG. 51. Sala Hina.

The process is well illustrated in plate XVI, *b*.[a]

Another well-known clay pit is situated on McClellen's branch, at the northeastern base of the Sacaton hills (pl. XVI, *c*), whence a whitish clay is obtained. The villages about the Casa Blanca ruin obtain clay from pits within a stone's throw of the ruin itself and from the river bottom near the village of Rso'tûk.

The tempering materials used in the clays last mentioned are sand and ground potsherds. The clay from the Skâsŏwalĭk hills is so coarse that it requires no tempering.

Red ocher is employed as a slip, which is applied to the surface of the common utensils just before the drying that precedes burning. The water coolers are usually made without this coating of ocher.

Black gum is used for decoration. This is obtained by boiling in a small earthen pot, or in a segment of a large one, mesquite chips

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[a] Samples of this clay were submitted to Doctor Wiley, Chief of the Bureau of Chemistry of the Department of Agriculture, who ascertained the percentage composition of the material to be as follows:

	Per cent		Per cent
Silica, SiO_2	59.64	Combined water, organic matter, and other volatile constituents (loss on ignition)	4.94
Alumina, Al_2O_3	18.55	Sulphuric acid, SO_3	.45
Ferric oxide, Fe_2O_3	6.72	Carbon dioxide, CO_2	Trace
Manganous oxide, MnO	Trace		99.90
Lime, CaO	2.35		
Magnesia, MgO	1.44		
Alkalies, K_2O and Na_2O	5.81		

He also explains the general method of determination.

For industrial purposes an attempt is made to separate the proximate constituents of a clay by what is called a "rational analysis." For this purpose the clay is treated with sulphuric acid, which is supposed to dissolve the clay substance proper and leave insoluble quartz sand and sand composed of feldspar or other minerals.

In order that the composition of this clay might be compared with analyses of other clays made upon this plan, a determination was made of the matter insoluble in sulphuric acid in sample 24881, with the following results:

	Per cent
Clay substance	35.33
Quartz sand, feldspathic detritus, etc	64.57
	99.90

The sand insoluble in sulphuric acid is composed approximately as follows:

	Per cent
Feldspathic detritus, etc	28.57
Quartz sand	36.00

Comparison of these results with analyses given by Langenbeck indicate that the material represented by sample 24881 resembles the clays used for the production of so-called "red ware" more than any other class of clays used in pottery manufacture by civilized peoples. The following analysis of a typical clay used for making "red ware" is quoted from Langenbeck for purposes of comparison (The Chemistry of Pottery, 1895, 60):

Total analysis	Per cent	*Rational analysis*	Per cent
Silica	74.75	Clay substance	39.12
Alumina	12.55	Quartz	52.54
Ferric oxide	5.28	Feldspathic detritus	8.55
Lime	1.28		
Magnesia	.85		100.21
Alkalies	2.27		
Combined water	3.23		
	100.21		

from portions of the tree on which black gum has dried into hard scales. After boiling, this dye is in the form of a very thin liquid which is so pale that it is scarcely distinguishable on the dark clay, but after the vessel has been given a slight burning the pattern appears in deep black.

Implements

As the new vessel is built up the outside is struck with a paddle (pl. XVII, *b*), and the inside is supported by a flat circular stone about 10 cm. in diameter. A smaller stone is used to polish the outer surface. Long, smooth, finger-shaped stones are used in polishing the necks of vessels or in places where there are sharp curves.

Method

The fictile ware of the Pimas is made by coiling. The clay is first thoroughly dried, a condition that is easily and quickly brought about by spreading it on blankets in the sun. It is then sifted to remove the larger particles of stone. It is next mixed with water and kneaded a few minutes, formed into lumps the size of the fist, and laid aside to "ripen" over night. The base of the new vessel is begun by spreading a layer of clay over the bottom of an old vessel of suitable size and smoothing it down with the paddle until it extends out several centimeters from the center (see pl. XVII, *a*, where the vessel shown in the potter's lap has just been taken from the olla over which it was molded). The new bottom is allowed to dry an hour in the sun before it is removed and the process of coiling begun. Dipping the fingers in water, the operator moistens the edges of the new vessel, which has dried enough to retain its shape. Then taking one of the prepared balls of clay she rapidly rolls it between the palms until it is lengthened into a cylinder about 20 cm. long, which is laid on the margin of the vessel and pinched into shape. One or perhaps two more rolls are laid on to complete the circuit and then the paddle is applied with the right hand in quick taps to the outside while the circular stone is held on the inside with the left (pl. XVII, *b*). The handle of the paddle is held downward so that the transverse concavity of the instrument is adapted to the horizontal convexity of the growing vessel, which is held in the lap and the coils applied only so fast as they dry sufficiently to cause it to hold its shape. For this reason it is customary for a potter to model three or four vessels at the same time so there need be no delay by waiting for the last layer to dry. As each coil is finished it is placed where the sun can shine upon it and the work progresses much faster than it could in a less arid climate. As soon as the vessel has been built up a little way so there is room for the paddle to be used above the plane

of the bottom it is placed on the ground and a little loose soil is drawn up to serve as a support and in this it is turned slowly with the hands as required (pl. XVII, c). As the lower coils become dry they are smoothed with a polishing stone with strokes made from below upward; if a part has become too hard to be easily rubbed down the hand is dipped into the vessel of water that is within reach, and applied to the spot.

When the last coil has been shaped a dark red shale is ground in water until the liquid has become quite thick; this is applied to the outer surface with the hands. As the slip dries it is rubbed with the polishing stone until it becomes hard and smooth.

After drying over night the vessel is ready for burning. A very shallow pit is dug and a fire is kept in it for some time to dry the earth thoroughly, then a little dry mesquite or decayed willow wood is spread in the depression, and the vessel is laid on its side upon the wood and entirely covered with sticks laid up "log-cabin fashion." In the specimen shown in figure 52 the wood had burned away in about twenty minutes. The photograph was taken as the burning brands fell from the sides.

The final step, if the vessel is to be decorated, is to apply the black mesquite pigment with a sharpened stick (pl. XVII, *d*), made from Baccharis glutenosa, which has a large pithy center. The vessel is again subjected to heat for a few minutes until the decoration has assumed a deep black color, when it is finished.

Finished Products

Water reservoirs or coolers (fig. 53, *a*, *b*) are the largest and finest pieces of fictile ware made by the Pimas and Papagos. The latter carry on a thriving trade with the whites by supplying each house with one or more of these big round-bottomed pots, which are so porous that the evaporation from the outside measurably cools the water within. Although the term "olla" is applied to all Indian pottery in the Southwest, the word generally refers to this particular class of vessels. One will be found set in a three-forked post under the arbor at every Pima home.[a] An olla was secured which had been hidden away among the rocks in the hills for many years (fig. 54). It is among the smallest of those used for water coolers, and may well serve here to illustrate the minimum size and also a variation in decoration.[b]

Ollas with angular profile are not uncommon (fig. 55).

Cooking pots (pl. XVIII, *a*) are more numerous than the water

[a] The larger specimen (fig. 53, *b*) collected is 0.387 m. high, 0.275 m. in diameter at the top, and 1.161 m. in its maximum circumference. The decoration is derived from the Hohokam pottery of the Casa Blanca district.

[b] Height, 0.330 m.; diameter at top, 0.175 m.; maximum circumference, 0.950 m.

coolers. Every kitchen contains several; some of them broken in halves or smaller fragments, yet retained for use in parching wheat or corn over the fire, or for other purposes. They are undecorated and not carefully smoothed and polished "because they would be slippery to handle when they became wet."[a]

FIG. 52. The burning.

Bean pots are made with handles as represented in pl. XVIII, *b*. They form a distinct type unlike any other aboriginal ware known to the writer.[b]

Canteens were formerly made of pottery, but they have been

[a] The specimen shown in pl. XVIII, *a*, is 0.285 m. high, 0.255 m. in diameter at the top, 0.950 m. in maximum circumference.

[b] Pl. XVIII, *b*, represents one of these vessels, which is 0.159 m. high, 0.195 m. in diameter at the top, 0.748 m. in maximum circumference.

superseded by the cheap and scarcely less fragile metal ones of American manufacture. They were globular in form, and not provided with projections or loops for the attachment of straps. In fact, they were intended to be carried in the woman's kiâhâ; men on the warpath or traveling far from water must learn to endure thirst, but the women when compelled to go far for wood or cactus fruit were accustomed to carry water in these canteens. The vessels were sometimes broken, and Sala Hina told us of such an experience in which she nearly perished of thirst before she reached the river, though she had gone but a few miles from home. Canteens were decorated in a variety of patterns, including human figures.[a]

What may be termed a parching pan (pl. XIX, *a*) is made for roasting grains preparatory to grinding them for pinole. It is a large oval shallow dish with margin extended at ends for handles.[b]

a *b*

FIG. 53, *a*, *b*. Water coolers.

A tortilla baking plate (pl. XIX, *b*) is sometimes seen. It is nothing more than a slightly concave undecorated disk.[c]

Cups were seldom made of clay; dippers of gourd or bowls of basketry were lighter and less perishable. It is probable that most of the few cups of Indian manufacture now to be found among the Pimas were obtained from the Kwahadk'ṣ or the Papagos. They are so highly polished as to appear to be glazed and are usually decorated with geometric designs to which no meaning can be ascribed by their makers.[d]

[a] There are three specimens in the collection. Pl. XVIII, *c* is 0.195 m. high, 0.600 m. in circumference, with an opening at the top 31 mm. in diameter. Pl. XVIII, *d* is 0.135 m. high, 0.365 m. in circumference, and has an opening 29 mm. in diameter. Pl. XVIII, *e* is a double-necked canteen.

[b] Represents a pan that is 0.445 m. long, 0.354 m. wide, 0.117 m. high.

[c] The collection contains one of these plates, which is 0.350 m. in diameter and stands 63 mm. high.

[d] Pl. XIX, *e*, represents a cup which was made by the Kwahadk's and traded to the Pimas. It is 84 mm. high and 84 mm. in diameter.

Plates (pl. XIX, *c*, *f*) are now obtained from the Kwahadk'ṣ, but it is doubtful if the latter made them before the advent of the whites. They are polished and decorated in a manner similar to the cups.[a]

Fanciful figures of a variety of shapes are made by the Kwahadk'ṣ in imitation of American crockery, and the like, and are traded to the Pimas, who sometimes sell to gratify the desires of tourists for souvenirs, the seller being as ignorant of the fact that the buyer wishes to get specimens of Pima handiwork as the latter is of the fact that the ware is packed on the heads of women from the villages of another tribe 30 to 50 miles to the southward.

FIG. 54. Olla found hidden in the hills.

Two specimens (pl. XIX, *d*) were obtained from a Pima woman at Casa Blanca, who had "made them to sell," which have not the characteristic polish and the decoration of Kwahadk' ware. They are of interest because they show the Pima method of treatment of the human figure in clay modeling, and also the manner in which the face was painted. The larger effigy[b] has light brown lines on the body, both front and back, which represent a necklace, belt, skirt (perhaps), and what would seem to be the V-shaped opening at the neck of an upper garment. The face is painted in vertical stripes of red and blue, as was the custom with this tribe a few years ago. The front hair is represented on the forehead by prominent ridges.

FIG. 55. Olla with whitish designs on red ground.

The smaller effigy[c] has fewer lines on the face, and the body is undecorated.

From the ruins pottery spoons or ladles are sometimes taken which have apparently acquired magic import from the character of their source. These spoons are used in feeding the sick, and for no other

[a] The larger specimen figured is 264 mm. in diameter and 73 mm. high. The smaller is 212 mm. in diameter and 43 mm. high.

[b] Height, 212 mm.

[c] Height, 20 cm.

purpose, so far as the writer is aware. The collection contains one very old spoon of Pima manufacture,[a] which is practically an elongated bowl (pl. xx, *a*). Another specimen[b] was made for us to illustrate the type, which, though rare, is well recognized (pl. xx, *b*). The collection contains also a bowl (pl. xx, *c*), two coiled bowls (pl. xx, *d*), and two decorated bowls (pl. xx, *e*).

Pottery was mended with gum from the creosote bush, Larrea mexicana (pl. ix, *a*). This bush grows abundantly on the driest plains of the Gila watershed, but its leaves are so bitter that it is not touched by stock, however extreme may be their hunger.

BASKETRY

The art of basket making is practised in nearly every Pima home. The more skillful basket makers produce wares that are useful, durable, and handsome. The work, which is done by the women, requires much time and patience. Owing to the poverty of the tribe since the river water has been taken from them, some women have been induced to begin the manufacture of baskets without having received the necessary training in girlhood and without any pride in the finished product, as it is possible to dispose of them at once at a fair price, no matter how wretchedly bad they may be.

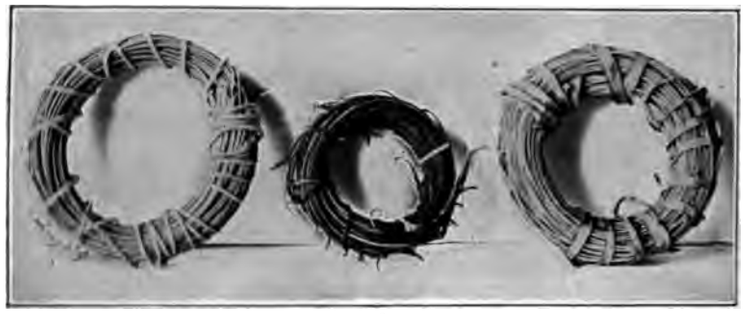
FIG. 56. Willow tree.

MATERIALS

There are three materials which surpass all others in importance, and quite a number that play a minor part. First of all should be named the willow, Salix nigra (fig. 56), twigs of which are gathered in March just before the leaves appear. The Yavapais who now live at old Fort McDowell use the willow for the white part of the outside of baskets and for the inner coil as well; but the Pimas employ the willow for the weft only. The twigs are about 50 cm. in

[a] Length, 115 mm.; width, 74 mm.; depth, 25 mm.
[b] Length, 130 mm.; width, 25 mm.; depth, 30 mm.

length. The bark is removed by catching it at the middle of the twig in the teeth and raising it far enough to insert the thumbs of both hands between the bark and the wood, and then running the thumbs outward to the ends of the twig. Two such movements



a *b* *c*

FIG. 57. *a*, Willow splints; *b*, martynia; *c*, cottonwood.

suffice to strip the twig, which is then split into three or four strips at the smaller end with the teeth and the splitting carried to the other end of the twig by careful manipulation with both hands, so that the

FIG. 58. Bundles of martynia pods.

strips may be as even as possible. These strips are kept in coils, which are from 10 to 15 cm. in diameter (fig. 57, *a*). Willow bark is also used in basketry, both alone (cradle shields) and in conjunction with other materials (grain baskets).

The stems of the cat-tail, Typha angustifolia Linn., are used as foundation in the common baskets. They are gathered in July when green, and are split and dried. The stalks curl inward along the split surface while drying, so that they have the appearance of round stems with a mere line running along one side to show where they were split. These stalks are from 1 to 2 m. long and are kept in bundles, sometimes 25 cm. in diameter, but usually much less.

The pods of the devil's claw, Martynia fragrans Lindl., furnish the third material necessary for the ordinary basket. The supply of wild plants is not large enough, and a few martynia seeds are planted each year by the basket makers. These are gathered in the autumn at any time after the plant has dried. They are made into bundles (fig. 58) for storing or for barter by tying a few hooks together and then pushing other hooks down into the center and allowing the pods to curve over one another. Each half of a pod is provided with one of these long recurved hooks, from 15 to 20 cm. in length (fig. 59). They are black on the surface, and hence desired for the purpose of contrasting with the white willow to form the designs. Their central portion is pithy, but the outside is very tough and woody. To prepare for use, the devil's claw is soaked over night and then buried in moist earth for a day or more. It is then dug out, usually by a party of women, who make a "bee" of it, and the outer fiber of each claw is removed by breaking the hooked end and holding it in the teeth while the split fiber is pulled off with the fingers. Figure 60 shows such a party stripping the fibers, which appear in a coil at the knees of the second figure from the right. In the foreground is a heap of stripped pods. A small board in front of each woman is to lay the splint on when thinning and shaping it. Instead of soaking and burying the devil's claw, some have begun to hasten the process by pouring hot water over it and proceeding at once to strip off the fiber. The strips are kept in coils (fig. 57, *b*) similar to those of willow. They are valued somewhat more highly than the willow splints, and

FIG. 59. Martynia pod.

hence a higher price is sometimes demanded for baskets in which a large amount of devil's claw is used.

Leaves of the agave are sometimes used, but baskets of this material are obtained chiefly from the Papagos. Wood from the slender branches of cottonwood is sometimes used to take the place of willow, but it is less durable and soon becomes yellow. It is prepared in the same manner and kept in the same sort of coils as the willow (fig. 57, *c*).

Wheat straw is extensively used in the manufacture of the jar-shaped grain baskets. It is of modern introduction, and has not fully supplanted the ancient style of grain bin.

FIG. 60. Stripping martynia.

The arrow bush (Pluchea borealis) was the principal material employed in the construction of storage bins or baskets. It is everywhere abundant along the river, and is one of the few shrubs of Pimería that is not armed with thorns, its slender, graceful stalks being easily manipulated (pl. XXI, *a*).

Reeds, Phragmitis communis, were formerly common along the Gila, but continuous seasons of drought caused them to disappear. Sleeping mats were made from them, but such mats are now rarely seen, agave leaf being used instead.

Plate XXI, *c* illustrates the crucifixion thorn, Holocantha emoryi, surrounded by saltbushes.

Implements

The only implements used in the manufacture of the common baskets are awls and knives. The awl was formerly of bone or mesquite wood. Now it is of steel with a wooden or gum handle (fig. 22, *a*, *b*). Common case knives or light butcher knives, well sharpened, are used to trim the strips of willow at the time of use.

Method

The ordinary baskets are made by the process known as coiling. The center is of devil's claw, which is generally started as a coil, but is sometimes made by the process called checker weaving for a few centimeters before beginning the coil. The half stalks of the cat-tail are again split before being used and about a dozen of these splints are taken to form a foundation. The other two materials, willow and devil's-claw splints, are kept in water at the time of use to render them flexible. One end of each splint is held in the teeth while the knife is rapidly scraped along the rough side and while the edges are trimmed smooth and made parallel. Upon this part of the operation depends much of the evenness and fineness of the finished basket. The details of the work do not differ from those of coiled basketry everywhere, which have been so fully and entertainingly described by Professor Mason. The margin was left with the splint wrapped smoothly around it until a few years ago when "some man," supposed to have been a Papago, "told them to braid it;" the tops of baskets are therefore usually finished by passing a single devil's-claw splint in and out and backward and forward over the margin, to which it gives a braided appearance. When the weaving is completed the ends of the splints project on the exterior surface, making it very rough. It is also soiled and stained from having been lying about during the intervals when it was not in the maker's hands for the weeks or months that have elapsed since it was begun. By means of a knife the longer and tougher ends are cut away, while the others are broken and the stains are removed by thoroughly rubbing the surface with leaves and twigs of the saltbushes, Atriplex lentiformis, A. canescens, A. polycarpa, etc.

Basket Bowls

This term may be accepted in lieu of a better one, for the tray- or bowl-shaped baskets, which are shallow and have their sides sloping at a low angle from the horizontal. They range from a perfectly flat disk to a bowl with rounded bottom having a depth of 20 cm.

The designs upon these old-style baskets are often very pleasing and even remarkably good. When questioned as to the meaning of the elements of these patterns, the basket makers invariably replied: "I don't know; the old women make them in this way. They copied

the patterns long ago from the Hohokam pottery." While these statements are true in the main, some of the elements will be seen to be of wide distribution and some are peculiar to the Pacific coast. There are three common designs: Those embodying the fret, the equal-armed cross, and the spiral. Nearly all that do not represent these directly are more or less evident modifications of them. The fret, which the Pimas probably with truth called the oldest motive, leads almost directly into the swastika and suavastika pattern, as shown in the illustrations. The flower design based upon the cross is apparently the same as that on the necks of water jars made by the Hohokam, and such vessels are similarly decorated to the present day by both Pimas and Papagos. On the pottery the design is laid upon a convex surface, while in the baskets it is worked upon the interior, or concave, side. The elements of the design are, first, a series of four radiating arms of black separating the petal-like areas which are usually in the shape of spherical triangles. The second element is a series of encircling lines that lie parallel to the radiating bars and follow their outline entirely around the basket, having also rectangular enlargements where they change direction to cross the ends of the bars or to follow along their sides. It is just such a design as might easily originate in pottery decoration where a complete line may be traced continuously, but it is not one that can be easily explained if it is assumed that it originated in basketry, especially when it is remembered that these people prepare no pattern whatever beforehand, but develop the designs upon the baskets as previously conceived in the mind.

The volute, or whorl, is a common motive in primitive art, and is especially frequent in Southwestern basketry. As the angular weaving necessitates irregularities in the lines of curvature, they are not infrequently modified by terrace-like enlargements. Terraces are used in combination with nearly all the other elements known to the basket maker.

It will be observed that the decoration of Pima baskets is in black on a white ground for the most part, yet the proportions vary greatly. Brown, and more rarely some other color, may be seen in perhaps one basket in a thousand. Occasionally a basket is made with a dozen or more blue glass beads fastened on the border at equal intervals by weft splints passing through them. Rarely, work or trinket baskets are made to sell that have open spaces in their sides.

Description of Plates

The fret is a common motive in Pima basketry. In the small—and usually badly made—baskets it is commonly single and of uniform width. In the first of our series (pl. XXII, *a*) it appears as a double line with five folds. Had there been but four the effect of the whole

would have suggested the swastika. The large basket, *b*, has three parallel lines, a larger number of folds, and an unusually large center of unrelieved black. Baskets *c*, *d*, and *e* exhibit slight modifications of the fret, in *c* the parts of the inner circle being four in number and in *e* five. The design in *f* is a fret of four folds, and the fret is the principal motive also in some of the upright baskets shown in plates XXIX and XXX. Basket *g* shows an equal-armed cross in white and a series of four broken lines that pass, in the form of a whorl, from near the center to the margin after each taking one and a half turns around the basket. Basket *h* combines the fret and whorl, there being seven radiating lines that reach the margin after half a turn each.

In plate XXIII, *a*, is shown a rare form—a flat disk, ornamented with a whorl of six broken lines, an intermediate form between the fret and the whorl. In *b* there is an unusual treatment of the dark center, elsewhere invariably a solid disk of black. It looks as if the maker had changed the design after starting the six rather irregular bars of black from the center. In *c* the six radiating lines advance toward the periphery by the interpolation of an independent motive that will be seen later in upright shapes. Baskets *d* and *e* are ornamented with five pairs of whorled lines that contain squares of black, which may also be regarded as an independent motive. In *f* the number 5 again reappears and also the simple motive of *c*, but this time in white on a black ground. This is called by some the "coyote track." It is well shown in plates XXIX and XXX.

Plate XXIV, *a*, illustrates a combination of the broken whorled lines of the preceding plate with a pattern obtained by the children at school in an early stage of their instruction in drawing. At the margin is the diamond pattern that has the effect of netting. In *b*, although the lines do not radiate from the center, they have something of the whorled effect, and they unite with the fret of the preceding illustrations a new element—the terrace—which is so common on the ancient pottery of Arizona. The parts are in five, there being two reduplications of the unit in the outer row to one in the inner. In *c* the parts are again in six. The central portion is difficult to analyze, but the outer repeats the terrace, together with a fret that by its breadth of line at the center suggests the form of the cross known as the swastika. Basket *d* has the fret combined with the terrace, being similar to the first basket in the last figure. The parts of the design in this plate are in four, five, and six.

Plate XXV, *a*, depicts a form of equal-armed cross that we shall later see passes into another type of design that is complicated, yet pleasing, namely, the flower pattern. Baskets with the design shown in *a* are quite common. In *b* the attenuated arms may be likened to the limbs of some giant spider. They will be seen to be nearly the reverse of the white arms of the design in basket *c*. Basket *d* represents a

variant that was seen in a few shallow baskets and which occasionally appears in the upright forms, as in plate XXX, *j*. It resembles a gigantic pictograph upon an ancient altar near Sacaton, the largest pictograph the writer has seen in Arizona. Baskets *e* and *f*, and also *a*, *b*, and *c*, plate XXVI, contain designs that are perhaps the most abundant to be found in Pima basketry. The patterns are whorled frets with many modifications. The decorative effect is enhanced by the addition of the triangular element, to which the same name, mo'ûmvĭtcka, "triangle," is applied as to the terrace. It is seen to be an independent element completed by an extended hook. In plate XXVI, *a*, *c*, the triangle at the margin is relieved with white, but in *b* it appears in its more common form. In plate XXV, *f*, the mode of origin of the triangle is seen in the terminal enlargement of a segment of the terrace. The triangle gives color balance to the whole, as in *b*, and also fills space due to the elements of the main figure being carried as a whole nearly straight to form an equal-armed figure on a spherical surface. These designs are usually in fours, though sometimes in threes and fives. Figure 61 includes two designs with dissimilar elements which adapt equally well rectangular designs to a hemispherical surface. The design, while clumsily made and unsymmetrical, is yet pleasing by the at least partial harmony of design and form. The motive in this design will be recognized by students of Californian basketry. The basket shown in figure 62 is a rarely beautiful one, having simplicity of design pleasing by its rhythm or repetition and colors well proportioned.

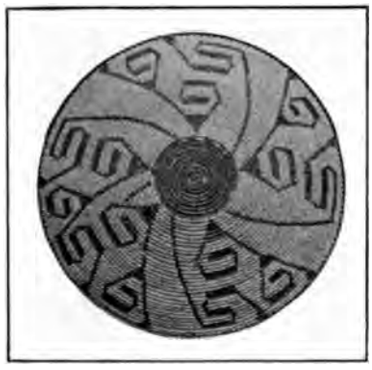


FIG. 61. Basket with scroll decoration.

FIG. 62. Basket with scroll-feet decoration.

Plate XXVII contains several examples of good baskets. The second has many triangles, those along the margin suggesting a mode of origin of what is known as the "top-knot" design. The outer band on this basket has the appearance of having been added as an afterthought, but such was not the case, as the device is not uncommon and occurs in the unusually fine basket shown in *c*. The latter is the

largest basket in the collection, yet it is so well proportioned, notwithstanding the reduction of the number of repetitions to three, that an artistic design is produced. The warp coils grow successively narrower from the center, thus making the walls thin and flexible. Figures *d* and *e* contain modifications of the equal-armed cross, with an apparently new element in *d*, which is shown in *e* to be a derivation of the triangle. These two baskets are examples of one of the oldest designs. It is also seen in the upright basket, plate XXXII, *c*. The white in *f* suggests the rattlesnake rattle design.

Plate XXVIII introduces a new design which the Pimas call si'sitcutcufĭk, "very much figured" or "complicated." Analysis shows *c* and *d* to be much simpler than they appear at first sight. The elements in *d* are an equal-armed cross and parallel lines around it, with enlargements wherever they change direction. The effect of the whole is suggestive of a flower with four petals. In *a* the petals appear largely in white. This flower design is said to be of recent origin. Sala Hina, who is perhaps 70 years of age, declares that it was unknown in her girlhood days.

Plates XXIX, XXX, XXXI, and XXXII include a series of baskets from photographs representing basket collections in Sacaton. Many have the upright waste-paper basket form, and are recent. Nearly all the Pima baskets made during the winter of 1901–2 were of these shapes. Many are decorated with simple motives that depend for their effect upon repetition. A notable feature of the ornament is the introduction of badly executed human figures. Certain traders urged the basket makers to put as many human and animal figures as possible on the baskets. Truly we need a society for the protection of American art. The most successful of these designs seen by the writer is the Gila monster shown in plate XXX, *n*. However, it is but a sorry substitute for the old-time simple motives. These baskets serve also to illustrate the varied treatment of the geometric elements met with in the shallow baskets as applied to the convex surfaces of the upright forms.

In conclusion, it is believed to be advisable to add the names of the elements of the designs which the Pima basket makers regard as distinct. But two in the list refer to natural objects, namely, numbers 3 and 7 below. It is worthy of note that the continued inquiries of visitors have aroused the interest of the natives to such a degree that they have begun to devise plausible interpretations to symbols the meaning of which is absolutely unknown to them.

1. Atc'ʊta, the black center of all baskets.
2. Ka'kiopĭns, "crossed lines" (pl. XXII).
3. Kâm'ketcĭt, "turtle," applied to a square design (pl. XXII).
4. Mav'spĭtchita, "locked together," the interrupted fret (pl. XXVI, *e*).
5. Mo'ûmvĭtcka, "triangular," all triangles and terraces.

6. O'pûmusŭlt, "parallel lines doubled on themselves" (pl. XXIII).

7. Pan ikâ'kĭta, "coyote tracks" (pl. XXIX).

8. Sâ'-âĭ, "figured," plain design with radiating black bars (pl. XXVIII, *e*).

9. Si'hitalduwutcĭm, "spiral," whorled or spiral designs (pl. XXIII).

10. Si'sitcutcufĭk, "very much figured," the flower pattern (pl. XXVIII).

11. Stoa, "white," having a few narrow lines.

12. Sûp'epûtcĭm kakaitoa, "striped with black and white," a general term for designs in alternating black and white lines.

13. Ta'sita, "set" or "prearranged," the swastika and suavastika.

14. Tco'ho-otcĭlt, "crooked lines," the fret.

FIG. 63. Kiâhâ.

KIÂHÂ

In the Golden Age of Pimería all burdens were borne by the women, either upon their heads with the aid of the head ring or upon their backs with the unique contrivance which they call kiâhâ (fig. 63), a name that it may be well to retain for the purpose of precise description, as the term "carrying basket" suggests the conical receptacle of other tribes, which is an entirely different affair. The kiâhâ, though unwieldy in appearance, is very light and strong, and heavy loads of wood and other bulky articles may be piled upon the framework, as may be seen in the series of pictures (pl. XXXIV *a*, *b*, *c*, *d*), which illustrate the manner in which the kiâhâ is loaded while set on the ground with the two long front frame sticks and a separate helping stick (fig. 64), forming a tripod. After loading the kiâhâ, the old dame is seen in *b* rising to her feet with the aid of the helping stick. Had she had to carry a baby in its cradle she would have

placed it in a horizontal position on the top of the heap of mesquite wood; as it was, her load weighed nearly 100 pounds, yet she knelt down, engaged her head under the carrying strap, and struggled to her feet without assistance (*c*). The method of unloading is shown in *d*, where, by bending forward, the entire burden is thrown off clear of the head. Figure 65 illustrates the manner in which a kiâhâ net is mended.

As the kiâhâ is distinctively a woman's utensil, so is it closely associated with her life history. The young girls of 8 or 10 begin to use small kiâhâs made especially for them or that have been cut down from old ones. They learn the methods of loading so that the burden may be stable and of proper bulk, they acquire the necessary nerve and muscle coordinations that enable them in later years to lift loads weighing more than do they themselves, they become inured to the fatigue of long journeys, and they learn to preserve their kiâhâs with care from rain. The maiden must have long and gaily-spotted frame sticks at the front of her kiâhâ, which are wound with long hair cords. She uses a helping stick that is ornamented with a long deerskin fringe pendent from the binding at the crotched end (fig. 64). As she walks along with the sharpened end of the stick thrust into the load the fringe hangs above and forward of her head, swinging at every step or fluttering with every breeze. It is indeed a conspicuous object, and it is not surprising that it should have caught the attention of every passing traveler, whose illustrations of it are uniformly bad.[a]

FIG. 64. Helping stick.

As the age of the owner advances she becomes careless of the appearance of her kiâhâ, the spots on the frame are less frequently renewed, the cordage grows short and worn, and the foresticks of the frame are cut down in length. However, her burdens do not diminish, and the woman here photographed, though her age exceeds the scriptural allotment, is yet able to carry more than 100 pounds at a load.

The kiâhâ is of entirely different materials from the ordinary Pima baskets. Wood is used for the four frame sticks, two at the front and two at the rear. Saguaro ribs are invariably used for the purpose, as they are very light, symmetrical, straight, and sufficiently strong. The hoop is a double band of willow.

[a] "They are highly prized by their owners, as they are very useful to them, and are made with much labor. For the only specimen I could obtain I was obliged to give goods to the value of $10." Bartlett, Personal Narrative, II, 236.

Agave leaf serves for the front matting or apron that rests against the back. Between the front and the frame a roll of bark or cloth is usually placed to prevent chafing. The headband is of the same material as the apron. It is really a circular band that is flattened out and doubled across the forehead.

Human hair is used to attach the hoop to the frame sticks. It is of 2-ply 4-strand cord, which is made fast to the hoop and, after drawing the hoop as high as possible to tighten the net, wound from 10 to 50 times around the frame sticks.

The maguey, Tasylirioni wheeleri, furnishes the fiber for the net (fig. 38). Yucca elata is also a valuable fiber plant and it is probable that the Papagos obtain netting material from Agave heteracantha. The first two of these plants are found on the higher hills

FIG. 65. Mending kiâhâ net.

and mountains of Pimería, whence they are gathered by parties who go especially for them. Pits are dug and fires are built in them as the maguey is gathered. After the fire has died down it is cleared out and the pits are lined with small stones. The maguey is spread on these, covered with earth, and allowed to roast over night. After it has been removed from the pit the pulp of the roasted plants is scraped away with a deer's scapula, leaving the fibers a foot or two in length. These are dried, and when they are long a roll 6 inches in diameter will be sufficient for a kiâhâ net. Such a roll of fiber is easily transported, and is a recognized article for barter between Pimas and Papagos. The spinning of kiâhâ thread is a social event, and the women gather for the purpose and gossip merrily as they twist the 2-ply twine, which is rolled into balls that may also be bar-

tered or kept for some time before being made into the nets of conventional pattern (fig. 63).[a]

After the net has been bound to the hoop by a spirally wound cord that completely covers the latter, it is colored with red and blue dyes in such a manner as to emphasize the outlines of the pattern.

Maguey fiber, or horsehair, may be used for the cord which extends from the headband to the frame. It is about 8 mm. in diameter. When of maguey, it is often so well made as to pass readily for machine-made cordage until we examine it closely.[b]

FIG. 66. Storage baskets.

STORAGE BASKETS

The use of large baskets made especially for storing grain and other supplies was widespread in America. They were and are yet of the highest utility to the Pimas, who have raised an abundance of corn and later of wheat to supply all their own needs and more. Two types prevail: A circular bin of arrow bush covered with bushes and earth (fig. 66), and a globular basket of wheat straw built up by coiling (fig. 67).

[a] For detail of the weaving see Mason's Origins of Primitive Culture, 251; also Report National Museum, 1894, 471, where Professor Mason makes the statement that the kiâhâ net, worked in what is "commonly called the buttonhole or half-hitch stitch, finds its most northern extension among the Piman stock. Nowhere in the Pueblo tribes is it found, according to the collections in the U. S. National Museum. But south of the Piman it occurs in Central America, in Latin South America as far south as Tierra del Fuego, where it will be found to be the only attempt at textiles." This is another link in the chain of evidence that separates the Pimas from the Hohokam and other Pueblo peoples.

[b] The collection contains an old woman's kiâhâ, the foresticks of which are 1.340 m. long and 3 cm. in diameter at the butt. The shorter sticks are 70 cm. long. The hoop is 65 cm. in diameter. The apron is 58 cm. long by 28 cm. wide. The headband is 35 cm. long and 8 cm. wide. The accompanying helping stick is 1.90 m. long and 22 mm. in diameter; the notch is 6 cm. long and 35 cm. wide at the opening.

The former type is furnished with a bottom of willow branches. The sides are built up by twisting rolls of arrow bush with the butts thrust into the coil beneath to bind the whole together.[a] This type is used for storing mesquite beans on the tops of the houses or sheds (fig. 4). They are also built on the ground in groups, which are inclosed by a low fence to protect them from stock. They are made before the harvest begins, and as the coils are large and there is no close work required a large bin may be built up in half a day.

The straw baskets have their coils fastened with strips of willow bark about 5 mm. in width. The stitches pass through the upper margin of the last coil and are about 20 mm. apart. The coils are from 1 to 2 cm. in diameter. The baskets are from one-half to 1½

FIG. 67. Small storage basket, showing weave.

meters in height. They are covered by a circular disk of the same material or, more frequently, by a section of the bottom of an old worn-out basket.

In making these baskets two rolls are carried around at once, but as they are made with some care it takes much longer than to make a bin of arrow bushes. The baskets are made after the harvest, when the straw is available.

[a] The remains of a basket of this type were found by the writer in June, 1901, when examining the two large cliff-houses about 4 miles south of the Salt river, opposite the mouth of the Tonto. Bandelier gives the ground plan of these structures in Papers of Archeol. Inst., Am. ser., IV, pt. II, 426. This would suggest relationship with the Pueblo cliff-dwellers (assuming that the place had not been occupied recently by Apaches or other invaders), were it not for the fact that this type of bins, as well as the arbors on which they are built, prevails among the southern California tribes.

Minor Types

Rectangular trinket baskets (fig. 68, *a*) are made of agave leaves, but nearly all are obtained from the Papagos, as the Pima women seldom make them. They are deeper than broad, somewhat enlarged at the bottom, and are provided with lids.[a] They are of the twined style of weaving. At a distance of 1 cm. from the interior margin of the lid the warp splints (so termed for the sake of clearness in description—they are exactly like the weft) are cut and the ends show on the inside of the lid. The weft is continued to the margin, turned back on itself at right angles to form what looks like a separate ring around the lid; at a height of 5 or 6 cm. it is again folded in and the ends of the splints are cut about 1 cm. from the last fold, so as to be concealed from view.

Fig. 68, *a*. Trinket basket.

"Medicine" baskets (fig. 68, *b*) are of the same material and style of weaving as the trinket baskets. They have a characteristic shape—long, square cornered, with rounded margin. They are made in two nearly equal parts, one of which slips over the other as a lid.[b]

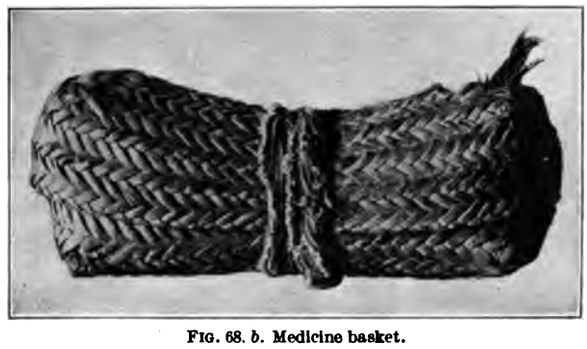


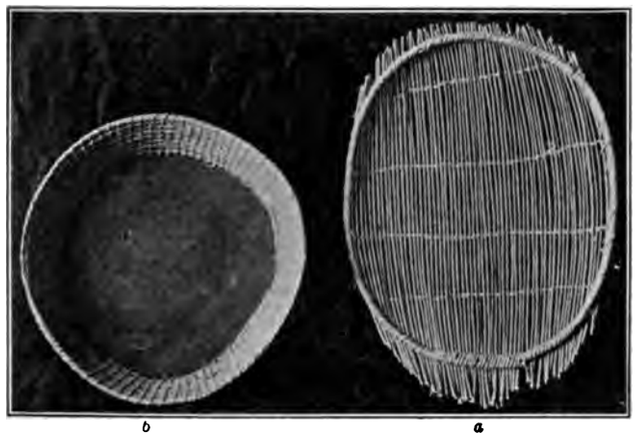
Fig. 68. *b*. Medicine basket.

Food bowls of remarkably fine workmanship and graceful shape were carried by warriors on the warpath. They were used to mix

[a] The collection contains a specimen of average size, which measures 19 cm. in height, 17 by 18 cm. at the base, and 16 cm. square at the top.

[b] The collection contains one very old medicine basket which is 29 cm. long, 10 cm. wide, and 9 cm. deep.

pinole in and also served as drinking cups. They were light and indestructible. They are no longer made and but two were seen on the reservation.



b a

FIG. 69. *a*, Old sieve; *b*, modern sieve.

Head rings of agave leaf (fig. 36, *b*) are occasionally seen, but they are supposed to have been adopted from the Papagos (see p. 113).

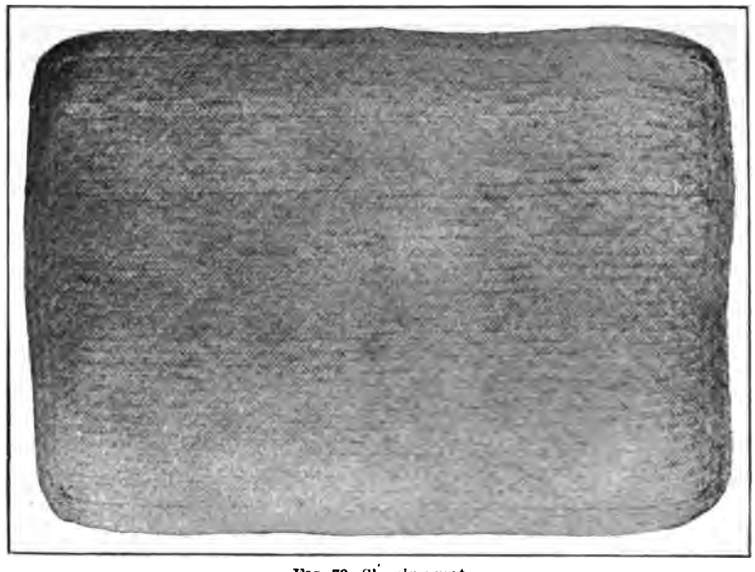


FIG. 70. Sleeping mat.

Oval sieves were made of willow rods, and were very useful in cleaning seeds, and in separating juice from pulp in a variety of plants

(fig. 69, *a*). They have been supplanted by a wire sieve[a] made by building a coiled basket rim around a piece of wire netting that has a mesh of 1 mm. (fig. 69, *b*).[b]

Bird traps, house doors, shelves, bird cages, and the like verge upon basketry, but these have all been described in connection with other objects of wood.

The hoods of cradles (described on p. 103) must be included in the list of articles of basketry in use by this people. They are of willow bark cut into strips about 5 mm. wide and woven in the simplest checker style. They are light and flexible, and thus better adapted for their purpose than if made of willow and devil's-claw splints. At the bottom of this hood or shield the strips are gathered into two wrapped bundles, which slip into place on each side of the first transverse bar beneath the baby's head The convexity of the rolls prevents the hood from slipping past the bar and the weight upon them insures stability, while at the same time the hood may be readily detached.

FIG. 71. Detail of sleeping mat.

SLEEPING MATS

Mats were formerly made by the Pimas of the cane, Phragmitis communis, that grew in abundance along the Gila until the water supply became too scant for the maintenance of this plant. They are now made of agave leaves by the Papagos, who barter them to the Pimas (fig. 70). They are woven in a diagonal pattern, each splint passing under three others before appearing again, and the wrong side being rough.[c] The splints are softened by soaking at the time of weaving and become somewhat stiff when dried. The warp and woof are alike,

[a] Twenty-six cm. in diameter at the top and 22 at the bottom. There are 7 coils in the rim, making it 4 cm. deep.

[b] The willow sieve in the collection was made on request by Sala Hina, as there are now none of the old style to be found. It is 32 cm. long, the ends of the rods projecting 3 cm. beyond the hoop to form a sort of handle. The hoop is 26 cm. wide. There are 4 cross-twisted strands to hold the rods in place. The willow rods are 2 mm. apart and 2 mm. in diameter.

[c] Fig. 71 shows the detail of this, with the ends of the splints that have been doubled back, showing at *a*, *a*, *a*. Thus the warp splints continue as such to the margin and double back to *a* as weft. The under or what may be called weft splints, similarly treated, appear in the figure at *b*, *b*, *b*. The length of the mat collected is 2.100 m.; width, 1.480 m.

and extend in a direction oblique to the sides of the mat. At a distance of about 7 cm. from the margin of both sides and ends the warp and weft splints are woven separately to form a double border, which is held together by single splints occurring at intervals of about 15 cm.

TEXTILES

Spinning

The Pimas no longer spin and weave; the art is dying with the passing of the older generation. It was with difficulty that enough raw

FIG. 72. Model of loom

cotton of Pima raising was secured to make the beginning of a piece of cloth on the small model loom shown in figure 72. This loom was made by the writer's old friend Kâ'mâl tkâk, who, though an adept in weaving, could not spin and had to engage a woman to do that portion of the work. She removed the seeds by first spreading out the cotton and beating it with a switch.

Kâ'mâl tkâk succeeded in finishing the spinning (see spindle, fig. 73) before the writer had an opportunity to witness the process. However, it has been well described by others.[a]

[a] Lieutenant Emory thus describes the manner in which it was done in 1846: "A woman was seated on the ground under the shade of the cotton sheds [arbors on which the cotton was spread to dry]. Her left leg was tucked under her seat and her foot turned sole upwards. Between her big toe and

Fortunately, Doctor Palmer obtained in 1885 a complete loom with sample balls of cotton thread (fig. 74) from the Pimas. The warp is smoothly and evenly spun into a thread about 1 mm. in diameter. The woof threads are softer and are about 3 mm. in diameter; the ball (Museum no. 76012) is 61 cm. in circumference.

Sinew from the back and legs of deer was made into thread and was used in tying cradle bars, shield handles, arrows, kiâhâ frames, and even tattooing needles.

An unidentified species of grass, called â'kivĭk by the Pimas, is said to have been spun into thread in ancient times. According to the myth, it supplied the son of Corn Woman with material for his bowstring. When there is sufficient rain, this grass grows on the Mo'hatûk hills, north of Gila Crossing.

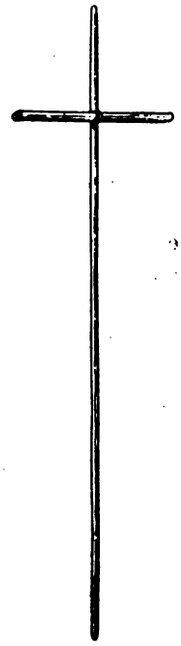


FIG. 73. Spindle.

WEAVING

The art of weaving was not highly developed among the Pimas, yet the few simple fabrics of cotton which they produced sufficed to satisfy their needs for clothing and adornment.[a] Unlike their neighbors, they have all but abandoned the art of weaving; at no time in their history have they advanced as far as the Pueblo tribes. Where they learned the art or if they developed it themselves we may not know. We can only hazard the guess that they had the ingenuity to imitate the fabrics which the Hohokam left behind or which the Pimas actually saw them using.

Early accounts of the Pimas[b] contain references to their fields of

the next was a spindle about 18 inches long, with a single fly of four or six inches. Ever and anon she gave it a twist in a dexterous manner, and at its end was drawn a coarse cotton thread." (Notes, 85.)

"The implements used by these tribes for spinning and weaving are of the most primitive character. A slender stick about 2 feet long passing through a block of wood, which serves to keep up the momentum imparted to it, constitutes the spindle. One end of this rests on a wooden cup inserted between the toes and the other is held and twirled by the fingers of the right hand, while the left hand is occupied in drawing out the thread from a supply of cotton which is coiled on the left arm in loose rolls." (Bartlett, Personal Narrative, II, 225.)

The spindle collected is of arrowwood, the cross bar is of cactus rib. Length, 730 mm.; diameter, 7 mm.; length of bar, 175 mm.; width, 31 mm. (Fig. 73.)

[a] "I suppose that all are provided with cotton blankets; but, owing to the almost incessant heat of the day, they seldom wear them," writes Bartlett (Personal Narrative, II, 229); but in fact there were many poor Pimas who had no blankets and in winter they must have been miserable, indeed, despite the mildness of the climate. Those who were unable to weave but were well to do obtained blankets by bartering corn, beans, and other produce, or horses at the rate of one horse for two blankets.

[b] Bartlett describes the Pima method of weaving as follows: "In weaving, the warp is attached to two sticks, and stretched upon the ground by means of stakes. Each alternate thread of the warp is passed round a piece of cane, which, being lifted, opens a passage for the shuttle in the manner of a sley. The operator sits in the fashion of a tailor, and, raising the sley with one hand, with the other passes the shuttle, which is simply a pointed stick with the thread wound upon it, between the threads of the warp. The work is beaten up after the passage of each thread by the use of a sharp smooth-edged instrument made of hard wood. The operation of course progresses slowly, and from the length of time consumed in spinning and weaving they set a high price upon their blankets, asking for them ten or twelve dollars in money, or a new woolen blanket of equal size. The weaving is generally done by the old men." (Personal Narrative, II, 225.)

cotton, which was picked and spread on the roofs of their arbors to dry in the pod. When dried and separated from the pods it was stored in large ollas, where, if covered, it would keep for an indefinite period in that dry climate. Usually, however, it was stored until winter, when there was time for the women to spin it into threads and for the men to weave it[a] into squares of cloth which served as robes for protecting the body by day and as blankets by night, girdles for the waist, and similar but smaller bands for the head. In later times it is said that bolts of cloth of considerable length were woven to be bartered with adjoining tribes, but this would seem not to have been in accordance with primitive custom.

Accounts of the Pimas that were written in the seventeenth and eighteenth centuries contain references to the use of wool as well as native cotton, but very little information is obtainable concerning the

FIG. 74. Cotton balls, native spinning.

use of wool, and there was not a single sheep on the reservation at the time of the writer's visit.

No dyes were used except a dark buff ocher[b] bartered from the Papagos, into which the cotton was dipped. No mordant was used and the resulting color was neither brilliant nor permanent. However, it was applied only to the selvage thread. Bayeta was unraveled to obtain scarlet thread for belts after the inauguration of trade relations with the Mexicans.

Sewing was unknown, and holes were patched by weaving in a new piece.

Implements and methods. The loom was simpler than that used by the surrounding tribes and was spread horizontally instead of being set upright. Four stakes were first driven firmly in the ground out-

[a] It is of interest to note that this division of labor differs from that of the Hopis and the Zuñis.
[b] A sample of the mineral used was found upon analysis to contain 30.52 per cent ferric oxide.

lining a rectangular space the exact size of the projected fabric. A deep layer of clean white sand from the river bed was spread between the stakes to prevent the under surface of the fabric from becoming soiled. The end or yarn beams were of saguaro ribs of suitable size, held in place across the end stakes by cords which were stretched taut at the sides. The beams were about 6 inches from the ground, thus permitting the warp to pass freely around them as it was wound over one and under the other in a continuous thread. A heavy double binding thread, usually dyed buff, was passed through the loops at the ends of the warp and was given a half turn as each loop was caught up. The yarn beams were then removed, leaving a lease rod of arrowwood in place of one of them. The binding thread was next bound to the yarn beams by a heavy thread wound in a spiral from end to end. The warp could then be stretched in place by again putting the beams outside the stakes and pulling the side cords taut. The heald rod was also of arrowwood put in place by passing a loop from a thread that had been slipped through the open shed from the right under each lower warp thread and pushing the rod through the loop from the left.

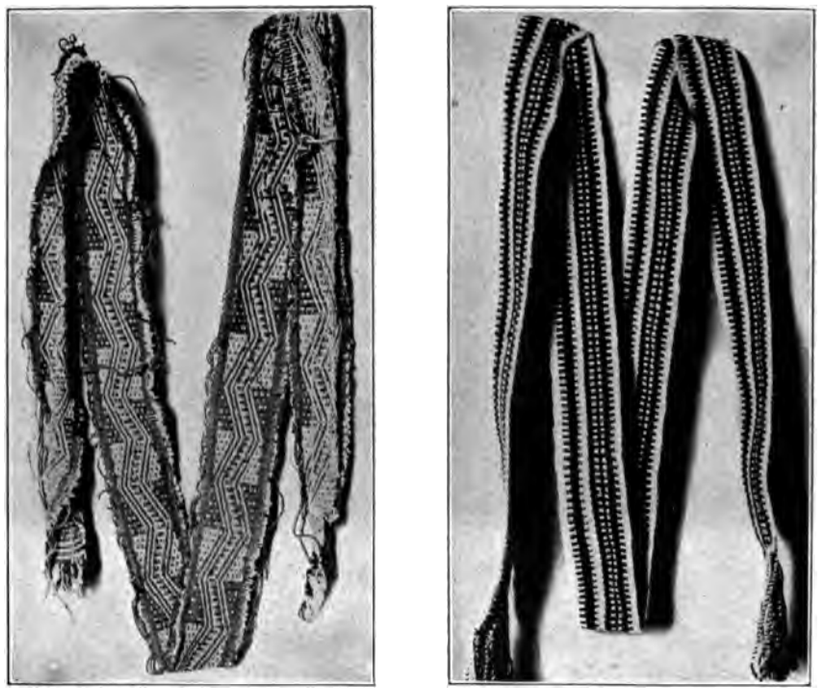
The weaver sat upon his haunches on the ground or on the cloth when it was finished too far for him to reach from the end. He lowered the lease rod beyond the heddle and gathered the upper threads in front of the heddle on a slender sharpened rod, which enabled him to lift them high enough to pass the shuttle through. The shuttle was an arrowwood stick to one end of which the weft thread was tied and then passed to the other in a slightly spiral direction; there it was wound twice around and then passed back; thus it was wound from end to end of the shuttle until the latter carried many yards of thread. After the shuttle was passed through the shed the thread was struck home with a flat batten of mesquite wood. If the warp threads were irregular, they were adjusted with a short peg which took the place of the comb used by the other tribes that weave in the Southwest.[a] Two heavy selvage threads lay at the side of the warp, and as the shuttle was passed through the shed it was brought between them and they were given a half turn to engage the woof thread before it passed back in the other shed which was opened by raising the heddle.

The width of the cloth was not well maintained, as there was a strong tendency for it to become narrower, but by the aid of a stretcher or temple this was partially overcome. The temple had two longitudinal grooves separated by a distance equal to the width of the cloth. In each groove was placed a section of willow or arrowwood stem an inch in length, bound with a heavy thread around the stretcher. The outer end of the short stick was sharpened so that it might be pushed

[a] Length of the specimen collected, 11 cm. It is shown in fig. 72 at the margin of the finished cloth, where it was pushed under a few threads to hold it in position for photographing.

through the cloth under the selvage, thus rendering the temple readily adjustable.[a]

The collection contains one old headband[b] or belt (fig. 75, *a*), which its owner had laid away wrapped around his long hair which he had been induced to cut off. It is woven from tightly twisted cotton yarn, the colors being black, white, green, and yellow, arranged in a zigzag pattern, as shown in the figure. The reverse side is without pattern and not intended to be seen. Another headband[c] (fig. 75, *b*) was made



a *b*

FIG. 75. *a*, Old belt headband; *b*, new belt headband.

to order and is of a much simpler design and style of weaving. The colors are black, white, and red.

There are two belts or headbands in the National Museum that were collected by Bartlett in 1850. One of these, no. 178911, is a

[a] Doctor Palmer collected a Pima loom in 1885, which is now in the National Museum, no. 76008. The beams are of cactus wood, 1.410 m. long, 6 cm. in diameter. The heddle is of arrowwood, the same length as the beams, and is 8 mm. in diameter. The blanket, which is about half finished, is 57 cm. wide and 1.100 m. long. The selvage is not dyed, but there is a red weft thread 29 cm. from the end and a second one near it which passes across the middle third of the cloth. The batten is 91 cm. long, 25 mm. wide, and the shuttle 92 cm. The cloth is smoothly and evenly woven, having 8 warp and 11 woof threads to the inch.

[b] Length, 1.900 m.; width, 65 mm.

[c] Length, 2.270 m.; width, 57 mm.

fine specimen of double weaving.[a] It is of tightly twisted cotton thread in dark blue, red, yellow, and white. The fringe threads are braided together so that two colors are united in each strand.

The other belt, no. 178910, is also double, and woven in dark blue, light blue, buff, red, and white.[b]

The abandonment of the art of weaving these simple fabrics with their tasteful patterns is unfortunate. Their loss is relieved by no compensatory improvement in other directions.[c]

ARCHITECTURE

In their natural state the Pimas built dwellings of four different types besides a storehouse. First in importance is the round, flat-roofed ki, which resembles an overturned wash basin in shape. Notwithstanding the fact that some have declared that the Piman ki suggests the pueblo style of architecture and should therefore be admitted as evidence of relationship between the Hohokam and Pimas, the author must confess that he has been unable to detect the remotest resemblance to the pueblo type. On the contrary, analogies may be found with the dwellings of tribes much farther distant from Pimería. The ki is built by the men, who gather in parties of ten or fifteen for the purpose—a custom which affords another instance of a different division of labor from that in vogue among the Pueblos, as with them the house building is the work of women.[d] Though the Pimas have had an example of pueblo structure at their very doors ever since they have inhabited the Gila valley, in the noble Casa Grande, the walls of which yet rise 30 feet above the plain, and have seen the adobe buildings of the Spaniards and Mexicans for three hundred and fifty years, nevertheless they have continued to construct houses of the simplest type that are but little better than temporary shelters. The first Piman adobe house was built by the head chief, Antonio Azul, twenty-two years ago, and since that time the people have made very commendable progress. Some villages—such, for example, as Blackwater—now contain few dwellings that are not of adobe. However, there are others, such as Skâ'kâĭk, that retain the old-time ki. As an inducement toward progress, the Indian Department or its authorized agent has stipulated that a man must cut off his long hair and build an adobe house before he may receive a wagon from the Government. The

[a] Length, 2 m.: width, 6 cm.; length of fringe, 15 cm.

[b] Length, 2.03 m.; width, 65 mm. The fringe is 20 cm. in length and neatly braided.

[c] Fröbel, who visited the Pimas half a century ago, says of their weaving, "Man würde sich aber irren wenn man glaubte, dass diese Künste durch die Bekehrung zum Christenthum befördert worden seien. Im Gegentheile sind sie dadurch in Verfall gerathen, denn bei den heidnischen Pimas findet man dieselben in einem höheren Grade von Vollkommenheit." Aus Amerika, II, 440.

[d] It is worthy of note that the southern California Coahuilla [Kawia] similarly differ from other American Indians. In that tribe, also, the houses (jacals) are built by the men. See D. P. Barrows in American Anthropologist, n. s., 1901, III, 755.

old custom of destroying the buildings at the death of their owners has practically disappeared, but its retarding influence upon architectural development continued throughout the aboriginal period.

Usually but one family occupies a single dwelling, though sometimes two and even three related families live together. If there are two, their sleeping mats are placed on each side of the entrance, so that in sleeping the heads may be toward the east, the door being on that side in order that the inmates may rise early to greet the Day god as he appears over the distant summits of the Sierra Tortilla. A more practical motive for placing the doors on the east side is to avoid the southwest winds which blow in the afternoon during nearly the entire year and which are especially strong during the month of March. The wind usually begins to blow at about 10 in the morning and increases to a velocity of 10 miles an hour by mid-afternoon, after which it decreases until midnight.

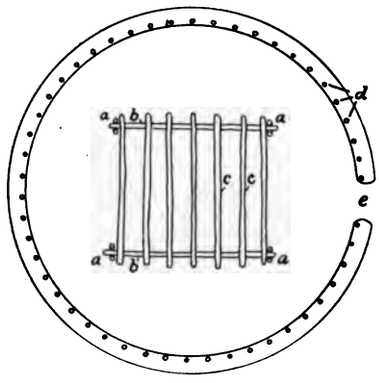


FIG. 76. Diagram of house. Scale: 1 inch = 10 feet.

TYPES

The general plan of the house is shown in the accompanying diagram (fig. 76). The central supporting framework is usually entirely of cottonwood, though other timber is sometimes used. The lighter framework shown in plate XXXV, *a*, is of willow, on which is laid the arrowwood, cattail reeds, wheat straw, cornstalks, or similar material that supports the outer layer of earth.

The roof is supported by four crotched posts set in the ground 3 or 4 m. apart, with two heavy beams in the crotches.[a] Lighter cross poles are laid on the last, completing the central framework. Light willow poles are set half a meter in the ground around the periphery of the circle, their tops are bent in to lap over the central roof poles, and horizontal stays are lashed to them with willow bark. The frame is then ready for the covering of brush or straw. Although earth is heaped upon the roof to a depth of 15 or 20 cm. it does not render it entirely waterproof. When finished the ki is very strong and capable of withstanding heavy gales or supporting the weight of the people who may gather on the roof during festivals.

[a] "For the larger dwellings nine are used—three on each side and one in the center." Bartlett, Personal Narrative, II, 233.

Lieutenant Emory estimated the size of the ki at from 25 to 50 feet in diameter,[a] which is much too high. From 10 to 25 feet would have been much nearer the true diameter. The average dimensions are as follows:

	Meters
Circumference	18.59
Interior diameter	5.48
Interior height	1.72
Distance between main supporting posts	2.28–2.43
Distance between posts and walls	.91–1.60
Diameter of rafters	.08
Distance between rafters	.30
Distance between horizontal ribs	.30
Distance between arched willow ribs	.20
Height of door	.81
Width of door	.61

The absence of a smoke hole is noteworthy, as it is almost universally present in primitive dwellings. Its absence can not be explained by the fact that the mildness of the climate permits the Pimas to spend most of their time in the open air and build their fires outside, because in winter fires are maintained within to such an extent that the roofs become loaded with masses of soot. It would seem probable that the roofs were not provided with openings in order that the houses might be as little open to the attack of the Apaches as possible were it not for the fact that the Cocopas and others living southwest of the Pimas build huts similarly devoid of smoke vents, which suggests that the Pimas have come from that quarter where the torrid heat renders indoor fires unnecessary at any season. The doorways were low and narrow for the same reason (60 by 90 cm. in size). They were closed by pieces of old blankets (pl. XXXV, *b*), by slats woven together with rawhide, or by loose sticks of wood (pl. XXXV, *e*, *f*).

In each village a low rectangular council house afforded a meeting place for the men and at times the women also of the community. Rev. C. H. Cook informs the writer that he has addressed an audience of as many as 80 persons in one of these houses, all bending low to avoid the smoke. The last council house was destroyed at Pé-eptcĭlt in January, 1902.

Another form of dwelling place was the woman's menstrual lodge, which was a mere shelter of branches to afford protection from the sun.

The fourth type of dwelling is the arbor, or, as some of the early writers termed it, "the bower." It is a cottonwood framework supported by crotched posts, roofed with arrowwood and earth, affording a shade from the sun, from which protection is desirable during

[a] Notes, p. 85.

the greater part of the year. The roof furnishes a convenient place for drying squashes, melons, fruit, and, in the old days, cotton, where the dogs and poultry can not disturb them. Under its shade the olla of drinking water is set in a crotched post or is suspended from above by a maguey fiber net. Here two parallel ropes may be hung and a cloth folded back and forth upon itself across them, thus forming an impromptu hammock in which to swing the baby. Here the metate and mortar are usually seen, and here the women sit and weave baskets or perform such other labor as may be done at home. It is the living room throughout the day the year around, and now that the fear of Apaches has gone it is becoming the sleeping place as well. From a hygienic point of view it is a great pity that the Pimas are learning to build adobes, for the tendency is for them to live indoors and to abandon the healthful arbors, every inch of whose floors is purified by a burning sun that throws its sterilizing rays well under the arbor during the morning and afternoon. Tuberculosis is present in nearly every family, and it is difficult, if not impossible, for the agency physician to induce those stricken with it to remain out of doors; they invariably confine themselves within the bacilli-laden dwellings. The arbor is kept well swept and clean, as is the entire yard about the house, so that a more healthful habitation could not be devised. Occasionally one or more sides of it may be inclosed with arrowwood through which the cool breezes readily find their way.

Beside each dwelling will be found a rectangular storehouse built with a framework of about the same shape and size as the arbor, but with walls of upright okatilla trunks or cactus ribs. The large bush, Baccharis glutenosa, is often used for this purpose. It is seen in its natural state in plate XXI, *b*; also surrounding the unit figure in plate XXXVI and forming the walls of the storehouse in plate XXXV, *f*. Plate IX, *b*, illustrates the okatilla, Fouquiera splendens, as it grows on the mesas within 2 miles of Sacaton. Each stem is crowned with a brilliant spray of scarlet flowers. Plate XXXV, *d*, shows the framework of a storehouse at the right and the finished wall of arrow bush in the center. Plate XXXV, *e*, is a complete storehouse with arrowwood bins for mesquite beans on the roof. Sometimes mud or adobe is added to the walls, which renders the structure equivalent to the Mexican jacal. The most noticeable feature is the door, made by piling up a great heap of unwieldy logs before the opening.

While not to be dignified by the name of house or dwelling, the Pima kitchen is an extremely practical affair, as will be realized by anyone who attempts to cook on an open fire exposed to storms. Plates VI, *b*, and XXXVI show the manner of arranging these windbreaks, for they are nothing more. In exposed situations the sand

in time accumulates in a drift of sufficient height to require a change of location. Not all families have such a kitchen, and there is reason to believe that it has been adopted from neighboring tribes in recent years.

CLOTHING

The description of Pima clothing need not be long. Throughout fully three-fourths of the year clothing for protection is quite unnecessary in that region, and that worn in winter was of the simplest character. The history of Pima clothing may be divided into four periods, namely: The first, in which natural products, little modified, were employed; the second, in which native textiles were introduced; the third, in which more or less remote imitations of Mexican costumes were in vogue; and the present period, when very plain and serviceable clothing is purchased from the whites.

Materials and Types

In primitive times the men wore breech-cloths (pl. XXXVII, *a*, *b*) and the women kilts that fell to the knee, both made of the soft and flexible inner bark of the willow, which is used by some among the Colorado River tribes to the present day. During the brief season when the temperature approached the freezing point at night the men wore deerskin shirts, and when abroad upon stony trails encased their feet in red-dyed moccasins, also of deerskin. For protection at home both sexes wore rawhide sandals, which appear to Caucasian eyes all too scant protection for the feet where nature arms most species, animate or inanimate alike, with tooth and claw.[a]

After the adoption of the art of weaving, the cotton blanket was worn in winter, and in summer also by the women, who girded it, doubled, around their waists with maguey cords, neatly woven belts, or merely tucked one edge within the other. When the winds from the sacred caves blew cold upon their shoulders they were shielded by the outer fold of blanket, which was drawn up around the neck; at least by all save the widow, who dared not raise the blanket above the armpits during the period of mourning. Plate XXXVI illustrates the mode of wearing this garment. As the blanket hung to the knees it might be converted by the men into baggy trousers by looping a cord from the girdle behind down between the legs and drawing it up in front. Some there were too poor or too strongly beset by the passion for gambling long to retain the single fabric that served for clothing by day and bedding by night, and they were compelled to resort to the bark garments of the ancients. Another material avail-

[a] As an example of this tendency of desert plants to clothe themselves with armor, mention may be appropriately made of the crucifixion thorn, Holocantha emoryi, as it grows abundantly upon the mesas between the Gila villages and the Salt River Pima settlement, 30 miles northward. It becomes a small leafless tree that is a tangle of thorny spikes, each a hand's breadth in length (pl. XXI, *c*).

able for winter blankets was rabbit skins, which were cut in strips and braided together in the manner customary among so many American tribes.

During the Spanish and Mexican régime the sombrero found favor, and even yet the steeple crown of this head gear may occasionally be seen. The women adopted a sleeveless chemise, which they wear to some extent to-day; it is shown in plate XXXVIII, *b*, though usually no longer worn by a woman so young. A few women also follow the Mexican fashion of covering their heads with improvised mantillas—usually towels or aprons—as shown in figure 5, where the costumes of a group of both sexes are well shown. This view was taken at the agency, and as they were unaware of the author's presence with the camera, which was kept concealed, the posing was perfectly natural. When the summer heat begins to be felt the older men strip to the breechcloth, as shown in plate XXXVII, *a*, *b*, when they are about their homes.

ESTHETIC ARTS

Personal Decoration

The Pimas of to-day are rapidly adopting the personal adornments of their civilized neighbors. With the exception of the manner of treating the hair, the old methods of enhancing personal beauty have been almost entirely abandoned. Judging from the statements made by the old people, this art could never have reached the development among the Pimas that it did among the Pueblos. Their status recalls that of the Yuman tribes on the great river to the westward.

Pride of person manifested itself among the men in the care of the hair and the elaboration of the designs painted upon the skin. Feathers and beads were also worn in abundance. When through uncleanly habits a man became too filthy his associates said "skulof," "He smells like an old man." But the whole tribe has a characteristic odor that is easily detected by the nasal organs of the whites; even the school children who are regularly bathed and well clothed exhibit this characteristic.

HAIR

Men wore their hair long (see pl. XLIII, *c*); that of the old chief Tiahiatam reached to his heels when he stood upright, but usually the hair fell about to the waist. At the age of 20 the young men began to braid or twist their hair into skeins, which retained the hairs shed and other things besides a marvelously convenient abiding place for microbes. It was the fashion to wear the skeins cut squarely across at the bottom, and they did not scruple to piece out their shorter locks with hair from the tails of their horses. Sometimes, indeed, they even added the hair of their women, who trimmed

their hair in mourning for lost relatives. The skeins were from 1 to 2 cm. in diameter; the hair of one old man, purchased from him, is 1.1 m. long; one of the skeins has been broken in the middle and tied in a hard knot. Such flowing locks could not, of course, be worn unconfined at all times; they were usually wound around the head and inclosed beneath a headband or by a cord of variegated colors (pl. XLIII, *a;* see also fig. 75). The earlocks that are the pride of so many tribes were sometimes braided by the Pimas and ornaments of shell, bone, and, later, tin and scarlet cloth, were tied to them. The front hair was cut squarely across the forehead.

The eyelashes and eyebrows were not tampered with, but the scanty beard was plucked out with tweezers. The hair of children was formerly "cut" with a burning brand whenever it reached their shoulders, in order that it might grow more abundantly. The portion cut off was mixed with mud and plastered on the head again for a few hours that it might improve the growth of the new hair. It was an evil omen if the child should chance to touch the hair just cut from his head, for was it not a sign that he would steal the sacred salt?

Women wore their hair long, but not twisted into skeins as was that of the men, and, furthermore, they were accustomed to cut it in mourning to a much greater extent than the men, so that it never attained extreme length. When at work it was twisted up on the head in a temporary coil that was confined by any convenient cord or bit of cloth. Unless engaged in vigorous exercise, as grinding with the metate, the older women allowed their hair to hang loose (pl. XXXVIII, *a*, XLVI, *c*). The front hair was trimmed to fall just clear of the eyes, as in same plate, *b*. Incidentally, it thus protected the eyes from the sun, though it is questionable how far the originators of the fashion were conscious of this useful purpose. Above all else the hair was the pride of Pima women; twice at least each day it was brushed until it shone in smooth, ebony waves that were ever luxuriantly abundant. "Every once in a while," or about once a week, the hair was treated to a mud bath made by mixing black river mud with mesquite gum and allowing the plaster to remain over night (pl. XXXVIII, *c*). Sometimes the gum was diluted with warm water and applied as a wash before the mud was laid on. The mud killed the vermin and cleansed the hair as does soap. The gum is believed to darken the hair and prevent it from growing gray. The Pimas declare that when widows mourn for four years without washing their hair it becomes a rusty red from being burned by the sun. The method of cleaning the hair above described is still practised, even by the younger generation.

NAILS

Finger nails were bitten off when they reached a troublesome length. The nails of the toes received little attention, and in old persons to-day they are seen of inordinate length, curled over the ends of the toes.

TEETH

Many brown teeth were seen, but no satisfactory information was obtained as to the cause. All agreed that the red berry of Licium fremontii would temporarily blacken the teeth, but as the Kwahadk's and Papagos, who do not eat this berry, have the darkened teeth, some other cause must be sought. Rumex berlandieri, Rumex hymenosepalus, and a thorny weed called by the Pimas *sâitûkam iavak* are also said to blacken the teeth. Charcoal was used to clean the teeth before the advent of the whites, and the practice is still continued.

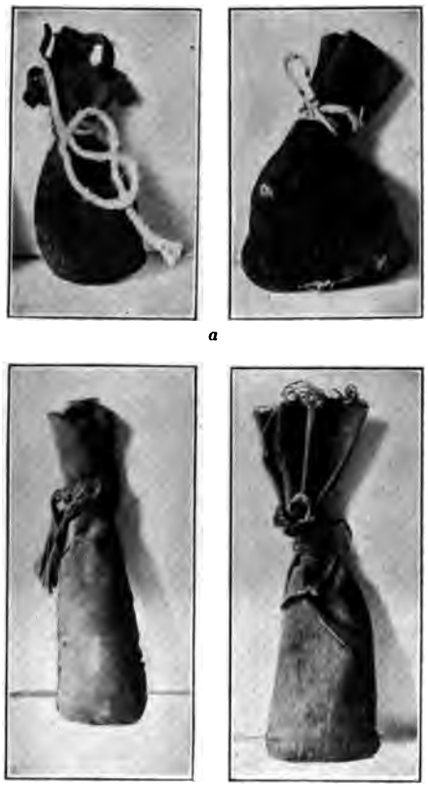


FIG. 77. Paint bags. *a*, Deerskin; *b*, cloth.

PAINTING

In bags of deerskin or cloth (fig. 77, *a*, *b*) bright-hued ochers and other minerals were kept with which to paint the face and body.[a] Baby Pima had his face painted immediately after birth with red ocher mixed with his mother's milk "to improve his skin." Thereafter the paint was mixed with grease or the grease was applied to the skin first and the paint was added. In cold weather the grease and color were applied to prevent chapping and even for the sake of warmth. Usually the

[a] Upon the four samples of face paint that were collected at Sacaton and submitted for analysis the following report was received: "It was found that with the exception of traces of manganese in 24884 and 24887 the color of these substances is due to varying amounts of iron as modified by the presence of and combination with other substances which by themselves possess practically no coloring power.

"The percentages of iron (calculated as ferric oxide) found in these samples are as follows:

No. 24883	6.13	No. 24885	13.87
No. 24884	1.28	No. 24887	9.62

face alone was painted, but during festivals and on other special occasions the entire body was painted. On dress occasions the lines on the face were made much narrower, and instead of being applied with the hands the color was laid on with a splinter or twig of arrow-wood 2 mm. wide by 80 mm. long. Both men and women painted their bodies and both used the same colors on their faces, but in different proportions. The men used more black and were especially careful to intensify the tattoo marks. The women also emphasized the tattooing, and there were black lines, therefore, under the eyes of both sexes, showing that the permanent embellishment was regarded as especially significant.

The designs were simple vertical and transverse lines, as shown in plate XXXVIII, *d*. The paint was not often washed off, but additional lines were added as the design became effaced. Each person painted his own face and used an olla of water as a mirror. The men painted the hair of the frontal region either white or red in preparing for a dance, and never both colors at the same time. The women painted their hair in spots and bands of white.

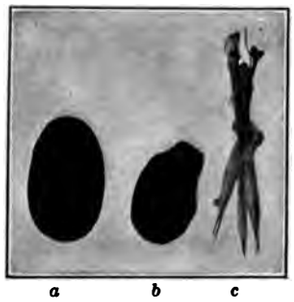
Besides the yellow ocher obtained from the Skâsŏwalĭk hills (pl. XVI, *a*), the yellow pollen of the cat-tail, Typha angustifolia Linn., was used. Red was obtained from the Mohaves, and in recent years from the Yumas. From the latter also was bartered the bluish black specular iron ore that glistened on the warrior's cheeks. Red and white were brought by the Papagos from out of the vast desert to the southward, the mineral resources of which are yet scarcely known to the invading race. Lastly, diamond dyes were used to some extent, but their day was short, for now no Pima paints at all. Indeed, it was with difficulty that two persons could be hired to paint their faces that the writer might photograph them.

If in the pristine period of Pimerían history the lines upon the rich brown skins were meant to symbolize the thought or fancy of the artists, no knowledge of the fact has survived the vicissitudes of war and strife through the centuries. To-day they are meaningless and to-morrow will have been forgotten.

TATTOOING

A few lines were tattooed on the faces of both men and women. Thorns and charcoal were used in the operation. The thorns were from the outer borders of the prickly-pear cactus; from two to four were tied together with loosely twisted native cotton fiber to enlarge the lower portion to a convenient size for grasping, while the upper end was neatly bound with sinew. The charcoal, from either willow or mesquite wood, was pulverized and kept in balls 2 or 3 cm. in diameter (fig. 78).

Both men and women did the work, but the female artist was preferred, as "she was more careful." Their fees were small and uncertain, as the operation was not one calculated to expand the heart of the victim and induce him to pay generously. The lines were drawn on the face first in dry charcoal, then some of the powdered charcoal was mixed with water, and the thorns were dipped into this and pricked into the skin along the outlines. As the operation progressed the face was frequently washed to see if the color was being well pricked in. Two operations were necessary, though it sometimes took more; one operation occupied an entire day. For four days thereafter the face remained swollen, and throughout that period the wound was rubbed with charcoal daily. At the end of that time a wash of squash seeds macerated in water was applied. Sometimes the lips were slow in healing and the individual was compelled to subsist upon pinole, as the swollen lips and chin forbade partaking of solid food; during this time the squash applications were continued.



a b c

FIG. 78. Tattooing outfit. *a*, Mesquite charcoal; *b*, willow charcoal; *c*, needles.

The men were tattooed along the margin of the lower eyelid and in a horizontal line across the temples. Tattooing was also carried across the forehead, where the pattern varied from a wavy transverse line to short zigzag vertical lines in a band that was nearly straight from side to side. Occasionally a band was also tattooed around the wrist.

The women had the line under the lids, as did the men; but instead of the lines upon the forehead they had two vertical lines on each side of the chin, which extended from the lip to the inferior margin of the jaw and were united by a broad bar of tattooing, which included the whole outer third of the mucous membrane of the lip on either side.

The tattooing was done between the ages of 15 and 20; not, it would seem, at the time of puberty, but at any time convenient to the individual and the operator. Oftentimes a bride and groom were tattooed just after marriage. All the older Pimas are tattooed, but the young people are escaping this disfigurement. As in the case of painting, the practice of the art is passing away and the meaning of the designs is unknown. The Pimas aver that the lines prevent wrinkles; thus fortified they "retain their youth." The purely apocryphal theory that the women about to be married have their lower eyelids tattooed, that they may thereafter "look at no man except their husband," is untenable, as we shall see when we come to study their marriage customs.

ORNAMENTS

Both sexes, but especially the men, wore strands of beads suspended from their ear lobes and necks. The beads and gorgets were of disks cut from seashells, stone, more or less wrought, bone carved and decorated, small deer bones without other manipulation than drilling, and turquoise, which was usually rubbed into flat rectangular pendants. Upon the arms of the women and on the right arm of the men were bracelets of similar materials. The men wore on the left arm a soft coyote skin wrist guard or one of rawhide for the bowstring. Large beads of blue Venetian glass were brought by the earliest Spanish missionaries, and are now to be found scattered about the sacred places of the Pimas.

"A very brave man" pierced the septum of his nose and wore therein a skewer of neatly polished bone, or else suspended from it a bit of turquoise or a shell. Two men yet living in the Santan village have pierced noses, though they long ago abandoned the practice of wearing anything in them. Indeed, all the old-time ornaments have been abandoned, and the Pimas exhibit a marked contrast to the bead-covered Navahos and other tribesmen.

The men ornamented their long rope-like locks with the soft breast feathers of the eagle, turkey, or other large bird. The war headdresses were of eagle, hawk, and owl wing feathers. We secured one that contained the hair of an Apache warrior in addition to the feathers (fig. 40).

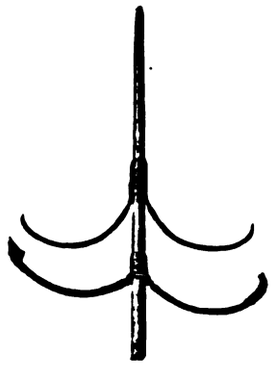


FIG. 79. Runner's hair ornament.

Contestants in the relay and distance races wore an ornament in their hair that suggests those of the Yumas, which in turn resemble the "eyes" of the Huichols.[a]

The women twined in their hair coronets of sunflowers or of corn husks, in recent years colored red or blue by boiling with calico.

ORNAMENTATION

We have seen that the Pimas, by means of paint, tattooing, and ornaments, had developed the art of personal decoration to a considerable extent. When we examine their implements and weapons it soon becomes evident that their taste for ornamentation was more rudimentary. Indeed, their desire for embellishment seldom reached expression in carving; it was confined chiefly to painting, as in the case of shields, or to the smooth finish given to their bows. Paint-

[a] Such an ornament was made for the writer's collection by Sika'tcu of arrowwood with four hooks of devils' claw attached to it with sinew. The hooks are arranged in the same plane and curved downward as shown in figure 79. The upper pair are wound with blue strings terminating with buff at the tips. Total length, 237 mm.; spread of hooks, 170 mm.

ing upon shields, cradle hoods, kiâhâs, and tobacco pouches was of a crude sort and manifestly inferior to that upon the person. The moderately smooth finish given to all weapons, to trays, ladles, pottery paddles, fire-drills, awls, pestles, axes, basketry, and some pottery was of course based upon utilitarian motives, though the gratification of esthetic needs must have been subsidiary thereto and concomitantly developed. That the desire for embellishment was less consciously felt is evident from the fact that the other articles made by the Pimas that may be equally effective, when smoothness and symmetry are lacking are coarse and rough. The metate, for example, is unhewn and angular except upon the grinding surface and presents a striking contrast to the symmetrical metates of the Hohokam. Not only do the Pimas not give a pleasing finish to all artifacts, but they exhibit so dull an esthetic sense in their treatment of the beautiful polished axes that they find about the ruins that we are moved alike by pity and indignation. There are tons of stones within easy reach of the villages suitable for roughening the grinding surfaces of metates, yet the Pimas take the axes that are almost perfect in symmetry and polish and batter them into shapeless masses for the purpose. To the writer this affords an argument stronger than all the surmises of the early Spanish writers to the contrary that the Pimas are not the descendants of the Hohokam. Furthermore, the poverty of design and the absence of symbolism are a very strong indication of relationship with the California tribes rather than with the Pueblos.

One of the most striking examples of the poverty of esthetic resource among the Pimas is seen in their textiles. The wonderful possibilities of this art were almost unknown. True, after the whites brought bayeta to them their weavers produced a very creditable belt by closely copying the ornamentation from the Hohokam relics and from their southern congeners. But the principal pieces, the blankets, the weaving of which kept the art of making textile fabrics alive, were ornamented with nothing more elaborate than a dingy border of doubled selvage threads. After the red thread was imported we find scant trace of it in the blankets. However, we must credit the Pimas with the rudimentary esthetic sense that found expression in the smoothness and evenness of weaving in these plain white blankets.

The arts of basketry and pottery making do not furnish much evidence of a well-developed esthetic sense in the Pimas. The former art is recent and borrowed; at best it is in a mediocre state. If the baskets of the Pimas are compared with those of the Yavapais (pl. XXXIII, *a*, *b*, *c*, *d*), who have also begun to use similar motives very recently, we see that the latter tribe manifests superior taste. The Yavapai baskets were the only ones at the Fort McDowell

camps at the time of the writer's visit, so that they were certainly not selected specimens, whereas the Pima baskets, and particularly the upright forms, which the writer did not collect himself, were better than the average Pima product. The Yavapai baskets command just double the price in the open market that is paid for Pima baskets of equal size. The principle of rhythm is well understood by the Pima basket makers, as the illustrations show. Both the simple elements, such as the so-called coyote tracks, or plain triangles, and the more complex, such as the flower pattern, or the scroll fret, are frequently repeated. But the principle of symmetry is not so well developed and it is rare that a basket exhibits it. The specimen in figure 62 shows that its maker possessed this faculty.

It is rare that the descent of pottery making from basketry is reversed, but among the Pimas this is true to some extent; that is, the basketry designs are in part copied from the pottery of the Hohokam. In part they were adopted from the Maricopas. The pottery designs likewise are copied, so that the credit due to the Pima decorators is reduced to a minimum. Their wares are mostly unornamented, as we have seen, and the decorations that are used are applied with indifferent taste. Though they have abundant examples of fictile ware scattered over their fields, much of which is embellished by indented coils, they seem never to have conceived the idea of utilizing this simple though effective form of ornamentation. The pottery illustrated in this memoir is rather better than the average Pima ware. The Kwahadk' pottery, while superior to the Piman, is yet lacking in symmetry. It is pleasing by reason of the rich brown color and the polish that almost equals a glaze, but the ornamentation is crude and vastly inferior to that of the ancient Hohokam.

We can not explain the inferiority of Piman ornamentation by saying that the Pimas had degenerated because they were harried by the Apaches and Yumas until they had no energy or inclination left for indulging their esthetic tastes, for this is not true. They whipped the Yumas until the latter were ready to accept peace upon any terms, as appears from the calendar records, which are well authenticated by white testimony. They kept the Apaches in wholesome fear of their clubs and arrows and made frequent raids into the enemy's territory. They never hesitated to attack the Apaches in equal numbers and fight hand to hand. In short, they were not the degenerates that some have considered them, an error that the records of Pima scouts accompanying the United States army in Apache campaigns would do much to dispel.[a] Their backwardness

[a] Early accounts of the Pimas uniformly testify to their ability to fight their enemies. They "have ever been numerous and brave," wrote Garcés a century and a quarter ago (Schoolcraft, III, 299), and in 1859 Mowry declared, "The Pimas and Apaches wage hereditary and fierce war, in which the Pimas are generally the victors." Arizona and Sonora, third edition, p. 30.

can not be explained by their environment, because the same surroundings produced the superior culture of the Hohokam, which there is no reason to believe was not indigenous. It may be surmised that the Pimas would have accomplished more in recent years in the art of ornamentation if they had adopted the curved knife that has become so widespread among other American Indians since the advent of the whites. A full discussion of the factors that have influenced their culture would better be deferred until after an examination of the evidence furnished by social organization (which through the absence of totemism has not directly influenced their art), by history, and by religion.

Musical Instruments

The Pimas have four kinds of musical instruments—the flute or flageolet, the basket drum, the scraping stick, and the rattle, the last having many forms. They say that the first two instruments were adopted from the Maricopas within a century or two. If this be true Pima attainments in instrumental music must have been of a very modest character indeed. There are few flutes to be found and the drum is never heard except in ceremonies which are themselves becoming increasingly rare. The gourd rattle is the commonest form of the last class of instruments.

a b c

Fig. 80. Flutes.

Flute

The Pima or Maricopa flute is of cane cut of such a length that it includes two entire sections and about 4 cm. of each of the two adjoining. It therefore contains three diaphragms, of which the two end ones are perforated, while the middle one is so arranged that the air may pass over its edge from one section into the other. This is done by burning a hole through the shell of the cane on each side of the diaphragm and joining them by a furrow. With such an opening in the upper section the instrument can not be played unless a piece of bark or similar material be wrapped over all but the lower portion of the furrow to direct the air into the lower section. The forefinger of the left hand is usually employed as a stop if no permanent wrapping directs the current of air so that it may impinge upon the sharp margin of the opening into

the second section.[a] As there are but three finger holes the range of notes is not great and they are very low and plaintive.

These instruments are usually ornamented with geometric designs having no symbolic significance at the present time among the Pimas. A bit of cloth or ribbon is sometimes attached to the middle of the flute, as in specimen *c*, figure 80.[b]

DRUM

Any shallow basket of sufficient size, such as are in common use in every household for containing grain or prepared food, may be transformed into a drum by simply turning it bottom up and beating it with the hands. In accompanying certain songs it is struck with a stick in rapid glancing blows.

SCRAPING STICK

a b c d e f g

FIG. 81. Scraping sticks.

The notched or scraping stick is in very general use to carry the rhythm during the singing of ceremonial songs. When one end of the stick is laid on an overturned basket and another stick or a deer's scapula is drawn quickly over the notches the resulting sound from this compound instrument of percussion may be compared with that of the snare drum. However, it is usually held in the hand and rasped with a small stick kept for the purpose. So important are these instruments in Pima rain ceremonies that they are usually spoken of as "rain sticks."

There are four scraping sticks in the collection. One of these (fig. 81, *a*), is smoothly cut, tapering, and evidently very old. The wood has not been identified, though it resembles ironwood. There are six small notches at the side of the handle, possibly fulfilling some mnemonic purpose. At the base of the series of notches is a broad X; there is another at the middle, and evidences of a third appear at the tip, which is broken away. There are 36 deep transverse

[a] "The principle of its construction is believed to be different from any known among other tribes or nations. These instruments are common with the Coco-Maricopas, and Yumas or Cuchuans, and among the tribes on the Colorado. Young men serenade their female friends with them." Whipple, Pac. R. R. Rep., II, 52.

[b] Length of flute *a* (fig. 80), 364 mm.; diameter, 22 mm.; *b*, length, 518 mm.; diameter, 23 mm.; *c*, length, 512 mm.; diameter, 22 mm. Flute *c* has an old pale yellow necktie tied around the middle as an ornament and to direct the air past the diaphragm.

notches on the lower part and 49 on the upper.[a] This stick was used for the cure of the piholt disease (p. 265) and was probably obtained from the Yaquis. The other three sticks (*c*, *e*, *f*) are much rougher and are undoubtedly of Pima make. The two large ones (*c*, *e*) have deep notches, which are few in number.[b]

RATTLES

The gourd rattle is used in most Pima ceremonies. It is made by fitting a wooden handle to a gourd in which gravel have been placed. The handle passes through the center and, reduced in diameter, projects slightly from the larger end, as shown in figure 82,[c] which also illustrates the distribution of the perforations, which are said to be for the purpose of "letting the sound out." It will be observed that the sacred number 4 is represented by the principal lines of holes extending longitudinally. About a dozen specimens were seen and none were decorated in any way except in the arrangement of the perforations; the handles were invariably rudely made.

FIG. 82. Gourd rattle.

A disk rattle that has been used in the Navitco ceremonies was secured at the village of Pe'-eptcĭlt. It is not a Pima instrument, but whether Papago or Yaqui the writer can not say. It contains two sets of four tin disks loosely held by wires passing through a wooden handle. The sound emitted resembles that of tambourine rattles (fig. 83).[d]

FIG. 83. Disk rattle.

From the same individual who used the disk rattle the writer obtained a rattle that had been used as a belt during the Navitco ceremonies. It is made of successive layers of canvas, red cotton cloth, oilcloth, and an old braided hatband, to which are attached by leather strings 21 brass cartridge shells (fig. 84).

There are two sets of cocoon rattles in the collection that were worn on the calves of the legs in certain ceremonies. The cocoons were

[a] Length, 675 mm.; width, 25 mm.; thickness, 15 mm. The accompanying stick (*b*) used to scrape with is 494 mm. long.

[b] Scraping stick (fig. 81, *c*), is 630 mm. long, 19 mm. in diameter, and has 11 notches; *e* is 625 mm. long, 26 mm. in diameter, with 12 notches; *f* is 555 mm. long, 11 mm. in diameter, and is provided with 35 shallow notches.

[c] Length, 332 mm.; diameter, 90 mm.; diameter of handle, 25 mm.

[d] Length, 247 mm.; diameter, 36 mm.; diameter of disks, 40 mm.

obtained from the Papagos or Yaquis of Sonora. They are of a species of bombycid moth; their outer coverings have been removed,[a] and a few gravel have then been sewed in each cocoon. There are

FIG. 84. Belt rattle.

70 pairs of cocoons in one strand and 66 in the other (fig. 85). The rustling sound given out by this number of rattles is not unlike the warning of the rattlesnake.[b]

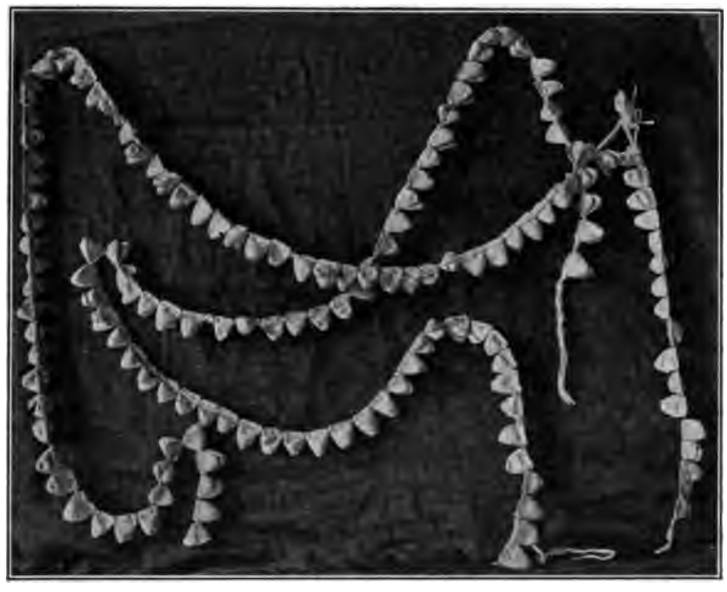


FIG. 85. Cocoon rattle.

At the village of Sacaton Flats at least one turtle-shell rattle is still used in the treatment of the "turtle disease," although no specimen of such rattle was seen.

[a] "The Huichols use the cocoons of Attacus orizaba for necklaces." Lumholtz, Symbolism of the Huichol Indians, 189.

[b] Each cocoon now measures 30 mm. in length by 25 mm. in breadth. The entire strands are 1.900 m. long.

Hoof rattles, usually of dewclaws, were of universal distribution among the American Indians and were common among the Pimas, though none are to be found at the present day. Bartlett figures such a rattle in his Personal Narrative (II, 223).

Dancing

Dancing was frequently indulged in by both sexes and was accompanied by song, together with instrumental music furnished by the basket drum and the rattle. The dancers stood in a circle with arms extended across the shoulders of those adjoining. This position did not permit much freedom, and movements were confined to stamping the feet and bending the body. When food was plentiful dances might occur at any time. Their number increased and their moral character sadly deteriorated as the men relaxed their vigilance after peace was made with the Apaches. The energy formerly expended on the warpath was then wasted in debauchery. The dances began in the morning and lasted all day. Both men and women came with freshly painted faces and bodies, the women with their hair neatly dressed. Each woman brought a contribution of food in the form of mesquite dumplings, corn and wheat pinole or tortillas, meat, and the like. Throughout the day a few at a time stopped to eat, so that the dancing and the feasting both proceeded without interruption. For an account of the war dances, see page 205; puberty dance, page 182.

Festivals

Of course all festivals partook somewhat of the nature of sacred ceremonies, but when this element was at a minimum, as in the saguaro harvest festival, its description may properly appear here with the arts of pleasure. These festivals were of annual occurrence, except during the occasional seasons when the fruit failed. The leading feature of these gatherings was the preparation and drinking of navait or saguaro liquor, and they became drunken orgies in which, since the introduction of knives and firearms, men were sometimes killed. The Government has prohibited "tizwin drunks," as they are called by the whites, though they are still surreptitiously held.

The sirup of the saguaro fruit is boiled for two days in the preparation of the liquor, and in the meantime the people gather and dance in the plaza nearest to the spot where the large ollas are simmering. During the final carousal all the men and some of the women become intoxicated. Through the influence of the missionaries, the native police under the agent's orders, and the actively exerted influence of the more intelligent men in the tribe, the custom is dying out. The subchief, Kâemâ-â (pl. II, *c*), at Gila Crossing has been a zealous advocate of temperance for a number of years, and it is not unlikely that the folly of such debaucheries was apparent to

some members of the Pima community during preceding generations before outside influences were brought to bear upon them. Indeed, some measure of prudence was enforced by the fact that the Apaches were hovering upon the outskirts of the villages watching for an opportunity to attack when the warriors were incapacitated for resistance.

The "Name song" is a social device that accomplishes the ends of organized charity, together with those of the ordinary festival. If a village suffers from a scarcity of food, it visits one where the crops have been plentiful and shares in the bountiful harvest in the following manner: The visitors camp outside the village and come in during the evening to learn the names of the residents and to arrange these names in the song, which provides places for two names in each stanza. There are seventy stanzas in the song, and if there are more than twice that number of visitors it may be repeated and other names substituted. Each visitor assumes the name of a resident of the village as a seal of fellowship and for the purpose of contributing to the pleasure of the festivities of the morrow, when the strangers come into the village to sing. As the song is sung and a name is called the wife or daughter of the person of that name runs with some light object, and the wife or daughter of the person who has assumed the name for the day pursues the other woman to take it away from her. If she is unable to catch her, some of the other visiting women aid in capturing the runner, and she leads her captors to where "the value of her husband's name," in the form of corn, wheat, beans, or other foodstuffs, is ready to be presented to the visitor.

When there are many participants in the ceremony nearly the entire day may be consumed in its performance. When some of the resident villagers are destitute, only the names of those who have plentiful crops are used. The visitors give nothing but their services as singers, and they receive very substantial rewards. Etiquette requires that the visit be returned within a reasonable time—late the same season or during the following year. However, when the nomadic Papagos come to give the Pimas entertainment the visit can so seldom be returned that the gifts are more of the nature of exchanges by barter, with the advantages in favor of the Papagos. The Pimas always received the Papagos cordially, though rarely returning their visits—so rarely that in the last fifty years the Pimas have sung the name song but twice in Papagueria, the two visits being to Suijotoa.

Athletic Sports

The men received thorough training in speed and endurance in running during their raids into the Apache country, but they had few sports that tended toward physical improvement except the foot races. Sometimes a woman ran in a contest against a man, she

throwing a double ball by means of a long stick, while he kept a kicking ball before him. But the women seldom ran in foot races, though their active outdoor life, engaged in the various tasks that fell to them, kept them in fit condition. However, they had an athletic game which corresponded in a measure to the races of the men and developed skill in running. This game was played as follows:

ÂLDÛ

Two of the swiftest runners among the women acted as leaders and chose alternately from the players until all were selected in two groups. Two goals were fixed about 400 yards apart, one side saying, "To the trail is where we can beat you," while the other party declared, "To that mesquite is where we can beat you." Two lines were formed about 25 yards apart, and the ball was put in play by

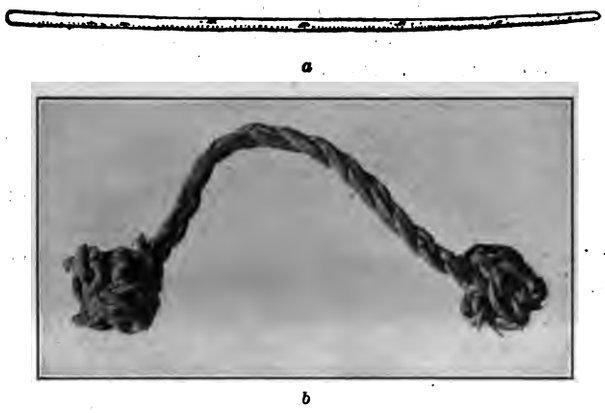


FIG. 86. *a*, Alder stick; *b*, double ball.

being tossed up and started toward the opponent's goal. It was thrown with sticks until some one drove it beyond the goal and won the game.[a] To touch the ball with the hands debarred the person from further play. This game was abandoned about 1885.

KICKING-BALL RACES

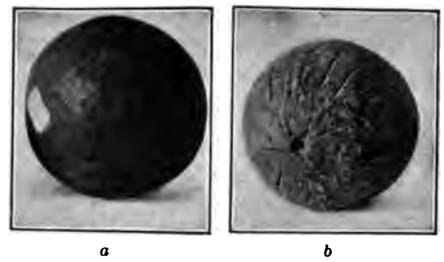
These races were frequently intertribal, and in their contests with the Papagos the Pimas nearly always won. The use of these balls in foot races is very widespread in the Southwest, and even yet we hear of races taking place that exceed 20 miles in length.

The kicking ball, when of wood, resembles a croquet ball in size, but it is usually covered with a coating of creosote gum. These balls

[a] The stick in the collection is of willow, 1.230 m. long, with a maximum diameter of 18 mm. The balls are in pairs, 15 cm. apart, connected by a 4-strand 2-ply leather thong, the balls being mere knotty enlargements of the thong (fig. 86, *a*, *b*).

are made of mesquite or paloverde wood (fig. 87, *a*, *b*). Stone balls about 6 cm. in diameter are also used, covered with the same black gum (fig. 88, *a*, *b*).

Each contestant kicks one of these balls before him, doing it so skillfully that his progress is scarcely delayed; indeed, the Pimas declare that they can run faster with than without the balls, which in a sense is true. Perhaps the occurrence of the stone balls in the ruins gave rise to the idea that they possessed magic power to "carry" the runner along, for all things pertaining to the Hohokam have come to have more or less supernatural significance. Two youths will sometimes run long distances together, first one and then the other kicking the ball, so that it is almost constantly in the air. The custom of using these balls is rapidly disappearing, as, it is to be regretted, are the other athletic games of the Pimas.



a *b*

FIG. 87. Kicking balls. *a*, Wood covered with gum; *b*, without covering.

RELAY RACES

At various points in Arizona the writer has found what appear to have been ancient race tracks situated near the ruins of buildings. One of these was seen on the south bank of the Babacomari, 3 miles above the site of old Fort Wallen. It is 5 m. wide and 275 m. long. It is leveled by cutting down in places and the rather numerous bowlders of the mesa are cleared away. In the Sonoita valley, 2 miles east of Patagonia, there is a small ruin with what may have been a race track. It is 6 m. wide and 180 m. long. At the northern end stands a square stone 37 cm. above the surface. These will serve as examples of the tracks used by the Sobaipuris, a tribe belonging to the Piman stock. The dimensions are about the same as those of the tracks that the writer has seen the Jicarilla Apaches using in New Mexico. The tracks prepared by the Pimas opposite Sacaton Flats and at Casa Blanca are much longer.

a *b*

FIG. 88. Kicking balls. *a*, Stone covered with gum; *b*, without covering.

The relay races of the Pimas did not differ materially from those among the Pueblo tribes of the Rio Grande or the Apaches and others of the Southwest. When a village wished to race with a neighboring

one they sent a messenger to convey the information that in four or five days, according to the decision of their council, they wished to test their fortunes in a relay race, and that in the meantime they were singing the bluebird (or, as the case might be, the humming-bird) songs and dancing in preparation. Both had the same time to practise and the time was short; in this preparation the young men ran in groups of four or five. There were 40 or 50 runners in each village, and he who proved to be the swiftest was recognized as the leader who should run first in the final contest. It was not necessary that each village should enter exactly the same number of men in the race; a man might run any number of times that his endurance permitted. When the final race began each village stationed half its runners at each end of the track; then a crier called three times for the leaders, and as the last call, which was long drawn out, closed the starter shouted "Tâ'wai!" and they were off on the first relay. Markers stood at the side of the track and held willow sticks with rags attached as marks of the position of the opposing sides. Sometimes a race was ended by one party admitting that it was tired out, but it usually was decided when the winners were so far ahead that their runner met the other at the center where the markers also met.

The women encouraged their friends with shouts in concert that were emitted from the throat and ended in a trill from the tongue. At the close of the race the winning village shouted continuously for some time; after which the visitors would go home, as there was no accompanying feast.

SWIMMING

Mention is made in the calendar records of parties of Pimas or Maricopas being engaged in swimming and diving to catch fish with their naked hands, and Mr Cook assures the writer that he has seen them do both.

GAMES

The Pimas were deeply imbued with the passion for gambling, and many games were played for the gratification of that desire. The old games are now practically abandoned and those who have the means and the desire to gamble employ a deck of filthy Mexican cards. Beads, paint, blankets, and any and all personal or family property were wagered. The women were quite as fond of gaming as the men, and staked their blankets when all else was lost, making shift to get along with a smaller piece of cloth in lieu of a skirt. When everything was gone the loser might win some stipulated article from her opponent if she could beat her in a foot race. A woman might gamble away the family sleeping mat, the metate, in fact any household property, although she hesitated to wager the drinking gourd, prob-

ably owing to the fear of provoking Navitco, the deity who gave the gourd to man.

In common with other American Indians the Pima knew naught of "luck" or "chance." He felt himself aided or opposed by supernatural beings, whose assistance he sought by gifts of beads and other sacrifices deposited on altars in the recesses of the hills, which will be described later. A favorite place of prayer for gamblers was the ceremonial hill northeast of Casa Blanca, near the center of Pimería. The following games were played by the men:

KI^{n}TS

Under the name of "ghing-skoot" this game has been described as played by the Papagos.[a] The Pima name of the game is ki^{n}ts, of the sticks ki^{n}tskŭt. Four sticks are used in playing. The set collected (fig. 89)[b] is of giant cactus wood. The sticks are not named "old man," "old woman," etc., as among the Papagos, but are designated as follows:

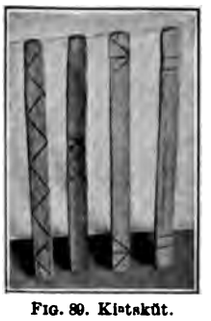


FIG. 89. Ki^{n}takŭt.

No. 1—Ki-ik, "four."
No. 2—Tco-otp', "six."
No. 3—Si-ĭkâ, meaning of word unknown to informants.
No. 4—Ki^{n}ts, meaning also unknown.

The players sit about 10 feet apart and put the sticks in play by striking from below with a flat stone held in the left hand. The sticks are held nearly vertical, but are inclined a little forward so that they will fall in the center of the space between the players, who rake them back with a long stick after each throw.

The count is similar to that described for the Papago game, if we substitute the Pima names for the pieces, as follows:

2 backs and 2 faces count 2.
1 back and 3 faces count 3.
Ki-ĭk facing up and others down count 4.
All faces up count 5.
Tco-otp' facing up and others down count 6.
All faces down count 10.
Si-ĭkâ facing up and others down count 14.
Ki^{n}ts facing up and others down count 15.

The counts are kept upon a rectangle marked upon the ground usually approximating 12 by 8 feet, having 10 holes or pockets, counting the corners each time, along each side. At two alternate corners are 2 quadrants called ki, "houses," of 5 holes each, not

[a] Culin in Report National Museum, 1896, 738. His description is from notes and material collected by McGee.

[b] Length, 222 mm.; width, 17 mm.; thickness, 7 mm.; hemispherical in section; not colored on either side.

counting the corner holes, called ut'pa, "doors."[a] The stick used by each player or side to mark its throw is called rsâika, "slave" or "horse." When a player is "coming home" and his count carries his "slave" only to the last hole of his house it is said to be "in the fire" and remains "burnt" until he throws a number less than 14 or 15.

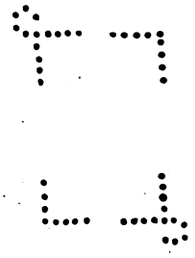


FIG. 90. Diagram used in kĭ-ts.

The corner hole of the rectangle is called tcolût, "hip;" the second, tco-olrsân, "near the corner;" the third, rsa-akĭt, "middle;" the fourth, ko'kĕtam, "above the end;" the fifth, ko-ok, "last;" the first hole of the house, tco'-oletam, "above the hip;" the second, ki-ĭk vak' utra, "four-hole end;" the third, vai-ĭk vak' utra, "three-hole end;" the fourth, sap'k' utra, "right end" or "place;" the fifth, tai-ĭ utra, "fire end" or "in the fire." (See diagram, fig. 90.)

HAEŸO

This game affords considerable amusement for the spectators as well as the participants. Four men provide themselves with moderately large stones, hayakŭt, which they throw between two holes set about 50 feet apart. All stand at one hole and try successively to throw into the other. If but one succeeds in throwing into the hole he and his partner are carried on the backs of their opponents across to the opposite goal. If both partners throw into the hole, they are carried across and returned to the first hole, the "horses" who carry them attempting to imitate the gallop of the horse.

VÂPÛTAI

A guessing game in which a number of players act as assistants to two leaders. A small bean[b] is used by the Papagos and a ball of black mesquite gum by the Pimas. It is placed in one of four joints of reed. The reeds are then filled with sand, all being concealed under a blanket, and the opponents guess which reed contains the ball. The reeds are called vâpûtakŭt (vâpûtai, lay), "laying implements" (fig. 91).[c] Reed *a*, called kuli, "old man," has 17 longitudinal rows of 8 spots each; reed *b*, âks, "old woman," is unmarked; reed *c*,

a *b* *c* *d*

FIG. 91. Canes used in vâpûtai.

[a] Culin in Report National Museum, 1896, p. 739.

[b] Obtained from Sonora from the tree called paowĭ by the Pimas and chilicoti by the Mexicans.

[c] The collection contains one set of reeds which are 27 cm. long and 22 mm. in diameter.

hota stcok, "middle black," has 6 longitudinal rows; reed *d*, maatcoʌolt, has 5 rows around the open end.

One hundred grains of corn are placed between the players in a hole, from which they are taken as won and placed in a hole in front of each player. When a player wins all the corn, he puts up a stick in the sand. The number of sticks may be from 1 to 10, as determined beforehand. Each player cancels one of his opponent's sticks when he wins one himself.

Two players confine their attention to the guessing; one on each side fills the reeds; one on each side watches the counting. Four men, one at each corner, hold the blanket, under which the filling is done, and sometimes offer suggestions to the leaders. The "old people," the plain reeds, and the marked reeds, are kept together and the "young people" are used by the opponents. When the two pairs are filled with sand and a bean or ball is concealed in each pair, the blanket is dropped and the reeds are laid in the center, each filler handing his pair over to the side of his opponent. If A guesses wrong and B right, four grains of corn are forfeited to the winner. If neither guesses right, they exchange reeds and begin again. If both guess right, there is no count. When one guesses right, he takes the four reeds and places his ball in one and the opponent then decides which pair it is in by laying one reed across the other in the pair which he thinks does not contain it. Then he pours out the sand of first one then the other. If he has guessed right, he does not score, but continues the play by filling and offering to his opponent. If he guesses wrong, the opponent scores 4 and 6 additional if the ball is in the under reed, 10 if it is in the upper.

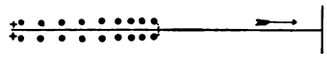


FIG. 92. Diagram used in vâputta.

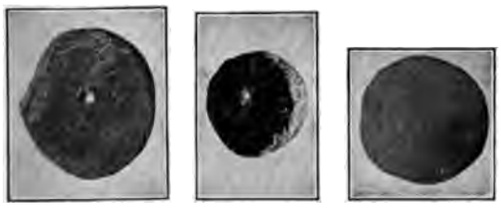


FIG. 93. Pottery disks.

Cheating is done in various ways, but there is reason to believe that this practice has arisen since the Pimas have come in contact with the whites.

VÂPUTTA

Any number of players may participate, but they are under two leaders who are selected by toss. Each draws up his men in line so that they face their opponents (fig. 92). A goal about 50 yards distant is marked out and the game begins. A small object, usually a circular piece of pottery, one of those so common about the ruins of the Southwest (fig. 93), is carried around behind the line by a

leader and placed in the hands of one of his men. The opposite leader guesses which man holds the object. If he guesses wrong, the man at the end of the line in which the object is held who stands farthest from the goal runs and jumps over the upheld leg of the man at the opposite end of his own line. This moves the winning line the width of one man and the length of a jump toward the goal. If the first guess is correct, the object is passed to him and there is no jumping until a guess fails.[a]

The boys play several simple games which develop skill in shooting the arrow or in running In the former class may be included the following game:

VATÂMΩMΩLĬTC HΩKOΛOLIWIA

The players stand in a circle while a boy runs around outside, dragging at the end of a string a bundle of rags. When the play begins each boy deposits an arrow in a heap and the one who transfixes the bundle as it flies past is entitled to the pile of arrows. At the end the best marksman may have nearly all the arrows. The same runner continues throughout the game and receives a few arrows as compensation for his services.

PAPAIETCITAKŬT

The name of this game signifies "cooking place." Several boys play in the game. A rag ball the size of one's fist is tossed up and the one nearest where it falls tries to throw it against another, using a slightly curved stick called henyusika. The one hit has to stand with his head down to protect his face while the others throw the ball at him. After all throw, the game begins anew.

OKMAITCĚKĚ

A bundle of grass, called woliwikke, is tied with willow bark so that it is about 125 mm. long and 50 mm. in diameter. The player tosses the bundle upward with his left hand while holding the bow in his right, ready to shoot the bundle before it can strike the earth.

When the bundle is thrown forward instead of upward it is called tcomält maitcěkě, "to shoot the bundle low."

NAOF TOWE KΩKRSA

The title given above signifies "prickly-pear standing opposite." There are usually four players, though sometimes two engage in this shooting game. Prickly-pear leaves are set up opposite each other at a distance of about 30 yards. The game is to pierce the

[a] The object is called rsâika, "slave." It is 40 or 50 mm. in diameter, is pitted in the center "to prevent cheating," and may be of either pottery or stone.

leaf with an arrow, and when four are playing the two partners share equally the winnings or losses. Arrows, bows, and such similar property as these ragged urchins possess are wagered. A bow is considered worth from 10 to 20 arrows, according to quality.

KΩORSA

Either two or four may play. The game consists in shooting an arrow so that it will lie on the ground at a distance of about 100 feet and then shooting two more arrows with the intention of casting them across the first.

KWAĬTUSĬWĬKŬT

The children sometimes amuse themselves by tossing into the air corncobs in which from one to three feathers have been stuck. They do not shoot arrows at them.

There are three games in addition to the athletic game of âldû which were played exclusively by the women.

MEKŬT TOAKŬT

Two women play this game. Five stones that have been carefully selected from rounded pebbles 3 to 4 cm. in diameter (fig. 94) are used. The first player calls one of these "my stone" and tosses it into the air, keeping her eyes fixed upon it while she snatches up one of the other four stones before the first falls. After all are picked up in this way she begins again and picks up two at a time, then three and one, then all at once. If she proceeds thus far without mistake she wins the game. The next game is more difficult. The named stone is tossed up as before, but those remaining are shoved under an arch formed by the thumb and middle finger with the first finger crossed over the middle one. The stones are pushed under the arch in the same order as in the first game. In the one-plus-three combination the player selects one stone which she calls her opponent's and says she will not pick that one up first.

FIG. 94. Gaming stones.

KÂ-ÂMĬSAKŬT

This stave game is played with eight sticks in two sets of four each, which are colored black on the rounded side in one set and on the flat side in the other, the opposite side being stained red (fig. 95). Two play, each using her own set of sticks, but exchanging them

alternately, so that first one set is in use and then the other. They are held loosely in the right hand and are thrown from the end of the metate or any other convenient stone. If all fall red side up one point is scored by a mark in the sand. If all are black two are counted. Winning four points completes the game.[a]

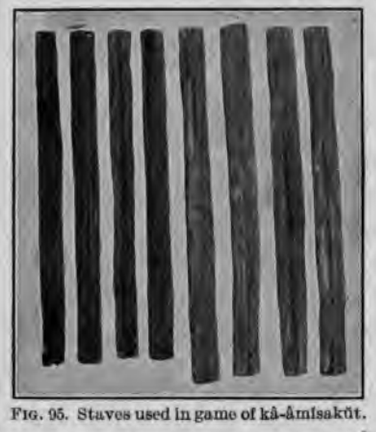


FIG. 95. Staves used in game of kâ-âmisakŭt.

TCALIKIWĬKŬT

This is the Gileño form of the widespread dart-and-ring game. It is not exclusively a woman's game, but was sometimes played by them. The younger generation knows nothing about it. The apparatus consists of a series of rings cut from cultivated gourds (fig. 96). They vary in diameter from 3 to 12 cm., and are strung on a 2-ply maguey fiber cord 50 cm. long. They are kept from slipping off at one end by a rectangular piece of gourd a little larger than the opening in the smallest ring, which is at that end. At the other end of the string is fastened a stick 20 cm. long, the outer end of which is sharpened. The game is to toss the rings up by a swing and, while holding the butt of the stick, thrust the dart through as many of them as possible. If the thrower fails she hands the apparatus to her opponent, but she continues throwing as long as she scores, and counts the number of rings that are caught on the dart. In the specimen collected

FIG. 96. Dart-and-ring game.

[a] This is similar to the game described in Report National Museum, 1896, 742.

there are 14 rings, but only a few may be caught at a single throw. A certain number of marks, 2, 3, or 4, agreed upon in advance, constitute the game. These marks are made upon a diagram laid out in the sand in the form of a whorl (fig. 97). The scoring commences in the center, called the tcunni ki, "council house," and runs out to the last hole, called hoholdega ki, "menstrual house," which is on the west side of the diagram; then the score returns to the center before the player is entitled to one point toward game. If the player who is behind throws a number that brings her counter to the same hole as that of her opponent she "kills" the latter and sends back her counter to the beginning point, but this is not done if she passes her opponent's position.

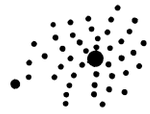


FIG. 97. Diagram used in tculiki-wĭkŭt.

Two specimens were obtained at Sacaton which were probably used in games by the Hohokam, illustrations of which are here presented for the benefit of those engaged in special researches concerning gaming devices.

CUP STONE

FIG. 98. Cup stone.

One of these objects is a cup-shaped stone of lava which was obtained from a Pima who had found it in one of the Gila Valley ruins west of the Casa Grande (fig. 98). Doctor Fewkes has called the writer's attention to the fact that it resembles the wooden cups used by the Hopis in a game not unlike the European "shell game."[a]

RING STONE

FIG. 99. Ring stone.

A few rings of porous lava have been found about the ruins which have been called "head rings" because of their resemblance to the ordinary head rings of cloth or bark in common use among the Pimas (fig. 99). However, as most of them are too small and the material is extremely unsuited for such a purpose it is much more probable that they were employed in some game with which the present race is unacquainted.[b]

[a] It is 96 mm. long, 53 mm. in diameter, with cavity 26 mm. in diameter and 42 mm. in depth.
[b] Diameter of ring, 115 mm.; internal diameter, 45 mm.; thickness, 55 mm.

SOCIOLOGY

Family Organization

RELATIONS BEFORE MARRIAGE

Accurate information concerning the relations between the sexes before marriage can only be obtained from the oldest persons among the Pimas, as the moral atmosphere has been heavily clouded since the advent of the Americans and since the peril from the Apaches has ceased to exist. With all their surplus energies expended in warfare, the young men formerly lived exemplary lives as compared with the youths of the last generation, who would chase and even lasso any girl that they could catch. Nevertheless, the conditions were never as bad as among the Yumas of that period.[a] Before the Pimas came in contact with "civilization" chastity was the rule among the young women, who were taught by compelling precept, though ever witnessing the demoralizing example of free and easy divorce.

PUBERTY DANCE

A girl reached the age of puberty at 11 or 12, sometimes as early as 10. The acquirement by a young woman of the (to them) wholly mysterious functional characteristics of the age of puberty rendered her an object of concern and distrust to the elders. When the fact was discovered her mother selected some favorite woman friend, not a relative, in whose charge she placed the girl for a period of four days. During this time the preceptress taught her how to perform such household tasks as she may not already have learned; also the principles of industry, honesty, chastity, and the like. They cooked their meals and ate together apart from their families. When not otherwise engaged the girl occupied her time in making a basket which must be given as a present to the elder woman. She talked little; if she wished to scratch her head she used a stick—to use the fingers at this critical period would cause lice. She dared not blow the fire or her teeth would come out.

There was "danger" in the girl that must be breathed out by songs ere she, the members of her family, and the community as a whole were exempt from the hazard of the lightning stroke and other perils. Woe to the girl who concealed her condition, for the medicine-man's magic would enable him to discover the culprit and should accident befall he would ascribe it to her. As a matter of fact, however, some girls avoided the "coming-out" ceremonies as long as possible and when the parents were poor no dance was held. When the parents had a sufficient supply of food on hand to entertain with becoming hospitality they invited friends and neighbors to participate

[a] Compare Rusling, The Great West and the Pacific Coast, 361.

in a dance that occupied four nights. The father and mother did not dance, but they took care to select the best girls to dance with their daughter "for their good influence." The men and women formed two lines facing each other on the hardened and well-swept plaza outside the house; their arms were extended to embrace those adjoining, and the blankets were stretched along the line to cover as many as they would reach over instead of being wrapped around each individual. The lines advanced and retreated rhythmically while the puberty songs were sung. These songs were in sets that were retained in the memories of certain persons and the set for the night was generally determined by the chance that brought the first leader to the spot when all was ready to begin. It was an exhausting dance, as there was no stopping for rest or food during the night. In the morning all returned to their homes to spend the day in sleep.

During the menstrual period all women were secluded for four days, during which they lived in the bushes near the village, making little shelters to shade them from the sun and occupying their time in making baskets. They lived on pinole, which was brought each morning and left at a short distance from their camp. Sometimes there were several together. They always bathed in the river before returning to their homes.

MARRIAGE

The youth of Pimería marry "early and often." In the majority of cases the choice is made by the girl who seeks to avoid an alliance with a lazy man. A handsome fellow is of course desired, but when she "knows in her heart" that he is the right man even the homely youth is chosen. As to what is the ideal of physical beauty, questioning naturally elicited only general information. For example, he must be tall and strong; dark, because he will not wrinkle as soon as the lighter colored; he must not be too fat. The woman must not be fat nor yet thin; "she must have good hair and a good face." The writer's informant volunteered information that a stranger might distinguish between the married and the unmarried women by the fact that the latter kept their hair in much better condition than the former. No peculiar style of hair dressing such as that in vogue among the Hopis serves to distinguish the unmarried girls (see pl. XLVII); with the change of state they simply "let themselves go" in a very human way, though even at the worst their hair receives probably more attention than that of the vast majority of their white sisters.

When a youth selects a bride he visits her home in company with a young married friend who pleads his cause while he sits in the background. After several nights of wooing by proxy, if his cause is favored he remains and is accepted as a husband without further ceremony. For four days they remain at her home and on the evening

of the fourth day they go to the home of his parents. At dawn the next morning the mother-in-law gives the bride a large basket of wheat to grind on the metate. She is expected to have completed the grinding by sunrise. In the quaint language of the interpreter we were informed that "if she ran away and left part of it unground it was a sign that she would not be a very good wife. When she finished her work she went quietly into the house and sat talking with those around her until she got acquainted with her new home." The groom presented the bride with a new blanket and his parents gave her presents, but there was no idea of purchase and no gifts were made to the bride's parents.

Occasionally a man possessed such a character that no woman would marry him, and more rarely a woman would remain unmarried. There is one such at Casa Blanca and one at Blackwater at the present time, the latter being regarded as possessed of supernatural powers because of her spinsterhood.

A rejected suitor might appeal to the medicine-man for assistance. If he stole a hair from her head and the medicine-man buried it the girl would die. How like the folklore of the Caucasian is this bit of superstition that savors more of vengeance than of love. But that the divine passion does take strong hold upon the Pimas there can be no doubt, as disappointed hopes have been known to lead to suicide.

Polygamy was practised to some extent, but the division of labor was such that no great economic advantage resulted. There were seldom more than two or three wives, though a chief's son in recent years had six. The plural wives lived in separate houses, the husband spending most of his time with the first. When a youth married he brought his wife to the home of his parents if there was room for them; if not, a house was built near by and the families ate together.

It was the custom for a widower to wed the sister of his deceased wife. "Supposing that she does not like the man and does not wish to marry him?" the writer inquired. Whereupon the answer was given with an air of superior wisdom, "She always wants to." Uncles and nieces are not permitted to marry and cousins do not marry "out of respect of the parents for each other." The most careful search failed to discover any trace of groups within the tribe between which marriage was prohibited.

DURATION OF UNION

Separation was lightly regarded and easily effected. The woman usually took the initiative, by either going to the home of her parents or going away with another man. Sometimes such remarks as "Rainbow Leaves is trying to get Sand Cloud's husband away from her," "Dawn Tinkle has changed husbands," were heard. Notwithstand-

ing the natural independence of the women, they made an effort to retain the affection of worthy husbands, and even resorted to suicide when deserted. Moreover, the desirability of lasting unions was recognized by some, as, for example, by the father of wise old Sala Hina. "Work well at home," he told her, "Go not to others for the morsel they must needs in hospitality bestow, and then when you serve faithfully your husband he will provide well for you. If the husband you choose proves to be lazy do not desert him; work in the field with him; help and encourage him."

CHILDREN

Further evidence in support of the fact that the Pimas were not a degenerate race at the time of the introduction of the white man's whisky and diseases is found in the size of their families. As many as twelve children have been known in a single family, and twins are received with general rejoicing. Every inhabitant of the village brings gifts and the mother feels assured that she will henceforth be a fortunate woman. Male children were preferred, because "they would grow up to fight Apaches." With the consent of the parents deformed infants were taken by the midwife, who watched them until they died of exposure and want of nourishment. So strong was the feeling of the Pimas against the abnormal that they tried in recent years to kill a grown man who had six toes.

Tribal pride is sufficiently strong to induce the Pimas to destroy infants of American or Mexican fathers in the same manner as those which are deformed. The writer learned of but two persons who had escaped such a fate. Inquiries concerning albinos met with the reply that "there never were any." Probably such a child would share the same fate as that accorded any other exhibiting abnormal characteristics.

A pregnant woman was not allowed to eat anything that an animal had touched. For example, if a gopher had cut a vine on which a melon was ripening, she might not eat the fruit; or, if the mice nibbled at a basket of wheat she might not eat of the tortillas made therefrom. She dared not go where Apaches had been killed, or the baby would die. If her husband killed a rattlesnake at that time, her child's stomach would swell and it would die soon after birth. She must not eat liver or her child would be disfigured by birthmarks.

During confinement the husband absented himself from the home and women friends attended the patient, who sat over a hole in the floor in which a cloth had been spread. The placenta was buried in a hole and covered with ashes. The mother bathed in the river immediately after delivery, and until the umbilicus of the child was healed she dared not eat salt. At times much pain was suffered, and some died

in labor, in which case, if the child lived, it was taken in charge by the maternal grandmother.

Babies were nursed until the next child was born. Sometimes a mother nursed a child until it was 6 or 7 years old and if she became pregnant in the meantime she induced abortion by pressure upon the abdomen. The unborn was sacrificed because it was believed to be prejudicial to the welfare of the nursing child, which the mother loved the more "because she could see it." Illegitimate children were aborted at three or four months. One case of abortion at seven months was reported, but it was done with the aid of the medicine-man. These operations were usually successful, but in a small percentage of cases they caused the death of the woman.

No attempt was made by any of the Pimas to explain the cause of sterility.

The tribe has been large enough to prevent ill effects from close inbreeding, and there has been a constant addition of foreign blood. Sala Hina (fig. 51), who is perhaps 65 or 70 years old, recalled the names of three Apache women who had been married by Pimas. One of these had "many children." She had also known two Maricopa men married to Pima women and two Pimas married to Maricopa women. How lasting these unions had been she was unable to say. There is a Hare-eater from Sonora and a Yaqui who have married Pima women at one of the upper villages. Intermarriage with the desert-dwelling Kwahadk'ṣ has been fairly common. The father of Sala Hina was a Kwahadk' and prominent in Piman history as the man who brought the first cattle to the tribe. The few Kwahadk' women among the villages make the peculiar pottery that is characteristic of their tribe, and which should not be confounded with that of the Pimas. Detecting a slight dialectic difference in the speech of one of the temporary interpreters the author learned upon inquiry that his mother had been a Kwahadk'. Another interpreter said that his people called him "mixed," which is not surprising, as in his veins flowed the blood of Pimas, Maricopas, Papagos, and Apaches, peoples of three distinct linguistic stocks. The greatest influx of foreign blood has been from the related Papago tribe whose caravans annually made their appearance at the harvest season. Some Papago families have always lived with the Pimas, at one time forming an outpost on the north by maintaining a village on the Salt river.

In the past there was also some intermarriage with the Sobaipuris, and there is both traditional and historical evidence of the final amalgamation of the remnants of that tribe with the Pimas. Some were captured by the Apaches, as shown by Bourke in his researches upon the clans of that tribe. "The Apaches have also among them

Tze-kinne, or Stone-house people, descendants of the cliff-dwelling Sobaypuris, whom they drove out of Aravypa Cañon and forced to flee to the Pimas for refuge about a century ago." [a]

CEREMONY OF PURIFICATION

As soon as a child began to creep about it was taken by the parents some afternoon to the medicine-man in order that the rite of purification might be administered and the child's future be rendered free from harmful magic influences. Putting a sacred pebble and an owl feather into a seashell containing water, the medicine-man waved an eagle feather (fig. 100) about, while the parents and the child drank the water and ate some white ashes or a little mud. This simple ceremony was sufficient to thwart the malice of all evil demons; lightning would not strike the child, and the possibility of accidents of all kinds was thus precluded. As a further precaution the mother must not eat salt for four days thereafter.

FIG. 100. Eagle feather aspergills.

This appears at first glance to be a modification of the Christian rite of baptism. Further investigation seems to show that it is similar to that and also to a purely aboriginal ceremony that in the opinion of the writer was practised before the advent of the friars. The Pimas declare that their "medicine-men got it up themselves." Cushing found "that the Zuñi of to-day are as eager as were their forefathers for baptism and for baptismal names additional to their own But it must be remembered," he continues, "that baptism—the purification of the head by sprinkling or of the face by washing with medicine water—was a very old institution with this people even before the Spaniards found them." [b] He also ascribes the readiness of various other tribes to receive baptism to the existence of their own similar custom. This readiness is otherwise difficult to account for, as the zeal, and, at times, lack of judgment, of the priests led them to baptize as many of the Indians as they were able to con-

[a] Capt. John G. Bourke, Journal of American Folk-Lore, IX, 114.
[b] Cushing in Thirteenth Annual Report of the Bureau of Ethnology, 335.

trol for the purpose; this procedure must have caused trouble very soon had the ceremony been wholly unknown to the natives.[a]

BAPTISM

Before a child is a year old it is named by friends of the parents in the following manner: The friends, or godparents, accompanied by other visitors, come for four successive mornings and seat themselves just before sunrise on the ground before the house in which the child lives. First one and then another of the company holds the child for a moment, but if it is a boy the kŏmpalt, godfather, repeats a ceremonial speech, passes his hands across the limbs of the infant and holds it aloft to receive the first rays of the rising sun; then he bestows upon the boy the name by which he shall be known throughout life—though nicknames are common and often supplant the baptismal name to some extent. If it is a girl, the kâmûlt, godmother, delivers the speech and gives the name. Beads were formerly held up to receive the first rays of sunlight, and were then placed about the child's neck. Gifts of clothing, food, baskets, and the like were also made by the godparents, who "think as much of the child afterwards as its own father and mother," said one of our informants. The parents in their turn reciprocate by naming the children of the couple that acts as godparents to their own.[b]

The names assumed by the men during later life are very frequently derived from the sexual organs, particularly those of the female, but such names are never bestowed at the time of baptism. Any unusual event or physical peculiarity may impose a name upon an individual. For example, a man who worked several weeks for the missionary was so well fed that he began to lay on flesh. Ever afterwards he was known as Preacher's Fat. One is known as Uvaatuka, Spread Leg, from his peculiar gait.

From the age of 10 until about the time of marriage neither boys nor girls are allowed to speak their own names. The penalty is bad luck in losing arrows in the case of the boys, in losing the rsa'lĭka, or kiâhâ stick in the case of the girls. The name of a deceased person is not used; he is alluded to as the brother of So-and-so. The word or words in the name, however, are not dropped from the language.

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[a] Whipple, Ewbank, and Turner in the Pacific Railroad Reports, III, 35, mention the occurrence of the custom of baptism among the Cherokees when the infants are 3 days old. "They believe that without this rite the child can not live. They have a custom of sacrifices and burnt offerings."

[b] "Cada niño tiene un *peri*, que es una especie de padrino, que convidan sus padres. Este, despues de haberle hecho un largo discurso al recien nacido sobre las obligaciones propias de su sexo, le va tentando por todo el cuerpo, estirándole los brazos y piernas, y luego le impone un apellido ó nombre de su lengua, no significativo. Despues de la ceremonia, el peri y el niño se reputan en lo civil como una misma persona, y tienen con sus respectivos parientes la misma relacion. Lo mismo hacen las mugeres en su proporcion con las niñas." Alegre, Historia de la Compañía de Jesus en Nueva-España, II, 217.

NAMES

The names of the Pimas proved so interesting to the present investigator that a number of examples were recorded, as follows:

Names of men

Rainbow
Rainbow-Bow
Stick-Rainbow
Cloud-Rainbow
Bear-Rainbow
Apache-Back
Sand-Arms
Cloud-Thundering
Cloud-Heart
Ant's-Cry
Moon-Fragment
Big-Moon
Scared-Eagle
Tail-Shed
Fog
Shining-Star
Coyote-Footprint
Coyote-Shed
Coyote-Dust
Coyote-Lightning
Coyote-Skin
Coyote-Flower
Coyote-Running-Races
Coyote-Runner
Coyote-Howl
Coyote's-Quiver
Bear
Bear's-Body
Bear's-Paws
Bird-Eyes
Black-Wheat
Frozen-Beans
Bean-Barter
Greasy-Eagle
Big-Eagle
Evening-Murmuring
Evening-Come
Closing-Twilight
Light-Shines
Wind-Milky-Way
Wind-Bow
Speaking-Bow
Evening-Hands
Running-Wind
Evening-Roaring
Soft-Feathers-Morning
Sun-Sparks
Eagle-Sparks
Hawk-Bow
Milky-Way-Bow
Sun-Bow
Foam-Bow
Sticking-Feathers
Hawk-Shield
Telling-Shooting
Raven
Brown-Eagle
Coyote's-Hair
Squash-Stem
Shields-in-Line
Eagle-Head
Light-Bird-Down
Shield-Light
Rat-Skin
Rattlesnake-Rattle
Thin-Leather
Hide-Bucket
Bad-Bow
Running-Noise
Red-Corn
Scorpion's-Stomach
Drum-Stomach
Hawk - Beginning-To-Lay-Eggs
Shining-Nose
Coyote
Centiped
Centiped's-Rattle
Beaver's-Mouth
Ducks
Birds-Feather
Bird-Sharp
Cliff-Rainbow
Many-Shields
Round-Frog
Shining-Back

Names of women

Cloud-Flower
Cloud-Peak
Cloud-Curve
Flowers
Sun-Flower
Flowers-Flying
Flowers-Running
Sun's-Rays
Sun-Flying
Morning-Rays
Morning-Running
Morning-Clouds
Morning-Waving-Hands
Bluish
Singing-Rattle
Pleasing-Mirage
Snowflakes
Water-Fern-Leaves
Foam-Rolling
Ancient-House-Shining
Ancient-House-Drops
Ancient-House-Sparks
Rainbow-Dispelled
Rainbow-Leaves
Leaves-Flying
Bows-Spotted
Water-Fern-Tops
Song-Flower
Morning-Disappearing
Morning-Beating
Clouds-Passing
Darkness-Passing
Darkness-Loosened
Morning-Loosened
Morning-Kneading
Willow
Sing-Tinkle
Bird-Down-Flowers
Bird-Down-Sprinkle
Rainbow-Water-Grass
Cloud-Tinkle
Gray-Leaves
Morning-Dew
Big-Leaves
Sunflower
Night-Wind
Dawn-Tinkle
West-End
Spring-Leaves
Morning-Water-Grass
Morning-Leaves
Sun-Leaves
Bow-End
Morning-Trail
West-Sprinkle
Quivering-Heat-Waves
Foam-Tinkle
Morning-End
Morning-Tossing-Up
Morning-Shadow
Cloud-Rolling
Water-Grass-Growing
Night-Twinkle
Many-Leaves
Sand-Cloud
Night-Flower
First-Flower
Red-Flower
Yellow-Flower
Singing-Noise
Two-Flowers
Basket-Leaves
They-Come
Sun-Mirage
Mirage-End
Salty
Raw
Soft
Alone
Crooked-Knife
Dew-Woman
Butterfly

EDUCATION

In addition to the education that every Pima child received by the method of imitation and apprenticeship, careful oral instruction in moral, religious, and other matters was also given by the elders. While yet quite young the Pima lad was taken up in his father's arms at daybreak and held there while he was told something of the mysteries of the great Sun god that nearly every morning in the year rises bright and free from clouds above the Sierra Tortilla. As he grew too big to be held in arms he had to sit up very straight and pay strict attention while his father or guardian lectured to him on the proper conduct of a Pima warrior and citizen; or, in other words, soldier and gentleman. If he was not fully awake and paid indifferent heed to what was told him, the father's stiffened middle finger would suddenly strike the side of his nose, bringing his face around until he looked straight into his father's eyes. (See pl. XLII, *c*, XLV, XLVI.)

He learned that he must be ever alert and ready with bow and arrows to repel the attacks of Apaches. Day by day this lesson was taught by precept and example until it became the strongest instinct of the youth to be ready and watchful. He was taught to go on scout duty in the morning or to look after the live stock before he partook of his morning meal. It was well for him to accustom himself to cold food and to that which remained after the family had satisfied their hunger, for it was only by practising abstemiousness that he could hope to be fit for the long war trail into the barren Apache stronghold. "If you are wounded in battle," said the father, "don't make a great outcry about it like a child. Pull out the arrow and slip away; or, if hard stricken, die with a silent throat. Go on the war trail with a small blanket. It is light and protection enough for one aided by the magicians. Inure yourself to the cold while yet a boy. Fight not at all with your comrades; preserve your strength for the combat with the Apaches. Then, if brave, will come to you high honor. Be unselfish or you will not be welcome at the fire of the friendly. The selfish man is lonely and his untended fire dies. Keep your peace when a foolish man addresses the people. Join not in his imprudent councilings. Above all, talk not foolishly yourself. Bathe in the cold water of the early morning, that you may be prepared for the purification ceremony after killing an enemy."

Thus the lad was taught fortitude, courage, forbearance, unselfishness, industry—qualities that might well be adapted to the changed conditions and incorporated in the system of instruction of the white man's "Indian schools." As time went on he learned that if he profited by the advice given him he would become a desirable party for some soft-voiced home keeper, and with his marriage his education ceased.

As a hunter he made his debut by giving away all the first deer that he killed. Afterwards he took his choice of the meat before sharing with his fellows.

Every youth when about 20 years old was told the ancient traditions, or Hâ-âk Aga, Story of Hâ-âk. For four days and four nights he remained with the keeper of the legends, who was usually a man selected as tribal historian because of possessing a good memory. During that period he was not allowed to eat salt. This and similar tabus with reference to salt may have been due to contact with the Papagos or to survival from the period when the Pimas lived by the sea.

The advice given Sala Hina by her father may be taken as an example of the kind of instruction given the girls. Sala's mother was careless and indifferent, so that the responsibility of her training fell upon the father, as often happens. "Stay at home with your mother," he told her. "Watch and help her handle the cooking pots, the mortar, and metate, that you may know how to prepare the seeds of Pimería. Keep the fire alive and have wood ever ready. See that the drinking olla is never empty. If you do these things well, you will not gad about after you are married and leave your hearth vacant so that your husband may come home to find the fire out or to put it out to your discomfiture; for it is the office of man to kindle the fire but the part of woman to keep it burning."

As in the case cited, one parent may neglect the training of the children. It rarely happens that both are wholly indifferent. They are inclined to punish the children more than do the members of any other tribe with which I am acquainted. The youngsters are seldom whipped, but they may be scolded, slapped, or shaken for their misdemeanors until they become 10 or 12 years old. If a girl stumbles and breaks an olla when going for water, her elders take some of the broken pieces and scratch her naked arm. The girls begin to assist in the cooking at 7 or 8 and at 9 or 10 they begin to make baskets. Some are lazy and are allowed to idle away their time, never making more than the single basket required during their puberty ceremonies.

The younger girls make very realistic rag dolls, which they carry through the drama of life with as great seriousness and "make-believe" as their white sisters. The writer once came upon them when they had twenty or more figures variously posed around them as spectators of the burial of a whole family, with accompanying destruction of ("make-believe") property. In addition to "funerals," they had parties for which they ground wheat for pinole, though an adult observer would have said that they were grinding up weed seed. The "dishes" were molded with mud on their little brown elbows and were ready for use after scarcely more than a minute's

drying in the sun. One form of mischievous activity was to play hide-and-seek in the wheat fields, but such a game was brief and apt to be attended with unpleasant consequences. In the evenings they played "puberty dances" or listened to the wonderful tales of prowess of their elders or of the adventures of the mythic animals of ancient Pimería. The boys practise day after day, year after year, until it is not surprising that they become such accurate shots with the bow. Woe to the birds and squirrels that cross their path. Unlike the pueblo lads, they are not prohibited from killing the rattlesnake, but they must not use the same arrow again. If the rattles are desired for ornament, they must be taken from a living snake. We have seen them teasing a Gila monster, but this and the horned toad are exempt from their arrows. Fish offered a splendid target for them when there was any water in the river and any fish were to be seen. There was no parental prohibition against destroying birds' nests, though the warning "If you touch quail eggs you will go blind" served most effectually to protect one species at least. The owl was not so much a bird of evil as of mystery and death, and its feathers were sought for their magic potency in medicine and other ceremonies. If a lad shot one, he had to pluck the feathers from the bird before it died or the magic power of the plumes was lost. Besides the bow and arrows the Pima youngsters possessed the sling of rawhide, which, by the usual process of evolution, came to be made in later years of boot leg. From the scanty Mexican population with which they came in contact they learned to use stilts, but none were seen in use during the writer's stay among them. As they grew older they were cautioned not to eat from an olla, else when they had to run away from superior numbers of Apaches the olla would get between their legs and obstruct their movements.

OLD PERSONS AND THEIR TREATMENT

Favored by the mildness of the climate, the lot of the aged among the Pimas was less unenviable than among most of the other Indian tribes. As they were a sedentary people, the custom of abandoning the aged on the march could not prevail. As a matter of fact, the old and helpless were not killed by the active members of the community, though they were sometimes neglected until they starved to death and sometimes they set fire to their houses to commit suicide. The heartlessness of youth sometimes manifested itself in such acts as throwing stones at aged persons, merely "to see them act like children."

One case observed may be mentioned—that of an old man at Sacaton dragging out a miserable existence. Totally blind and scarcely able to walk, he lived in a brush shelter about 8 feet square that contained a little straw and the single blanket that served to cover him. When he ventured abroad into the world the limits of his jour-

neys were prescribed by the length of the rope which was attached by one end to his doorpost. His food was cooked by some of his adult grandchildren who occupied a house near at hand. His time was spent absolutely alone in the shelter, which was as devoid of utensils or furnishings as any dog kennel. And yet, with a pride that is deathless in the human soul, he boasted of the time when he was a man among men and overcame the ferocious Apaches on the latter's own ground.

VIEWS CONCERNING DEATH

The usual primitive views of death—that it was not a natural event, but a result of magic influences brought to bear by enemies, human or superhuman—prevailed among the Pimas. In the legends the first death that occurred in the history of the human race is attributed to the venom of Soft Child, the rattlesnake, who was given the power of death to protect himself from unmerited abuse by man. The legends also indicate a disposition to view the Destroyer philosophically, inasmuch as the predecessors of the present race are regarded with commiseration on account of their becoming so crowded because of none dying to give place to the oncoming generation.

Again and again the information was elicited that those who died during the day were killed by the Sun, while those who died during the hours of darkness were killed by Night. This the author interprets to mean that the prayers that were regularly addressed to Sun and Night were for preservation, and that death resulted from some lapse or inattention on the part of these two deities. This agrees with the equally emphatic statements that "death is always due to magic, to animals, or to neglect of the ceremonies or tabus."

MODE OF BURIAL

At the moment of death the friends of the dying flee from them as if to avoid the magic that may not be satisfied with one victim. The near relatives cover the face of the corpse and bind the body in a bundle, with the legs drawn up. Before the Pimas obtained horses the body was borne to the grave on a litter. With primitive tools the graves were not dug as deep as at the present time, and to this burial in shallow graves is attributed the cause for covering the graves with the timbers of the sheds or storehouses of the deceased (see pl. XXXIX, *a*, *b*, *c*). Now a round hole is dug to a depth of 5 or 6 feet, then a small chamber is scooped out on the west side, in which the body is extended, with the head to the south. Billets of wood are then placed so as to lean against the roof over the body, so that in filling the grave no earth falls upon it. Medicine-men are buried in a sitting position, and in several instances have been buried in isolated places which have acquired special sacredness.

The dead are never cremated, as they are by the adjoining tribes on the west. There is an apparent exception to this rule in the occasional cremation practised while on the warpath. The writer is unable to account for this, unless it be due either to the influence of the Maricopas or to a survival pointing toward western affinities of the Piman stock. So far as ascertained, no disinterment for removal had ever been made by the Pimas. They never buried beneath the floors, as did the Hohokam.

FUNERAL RITES

Water and pinole are placed on the grave for the use of the soul in the other world, not on the journey thither, as that takes but a

FIG. 101. Funeral cache south of Casa Blanca.

moment's time. In order that the soul may betake itself to the proper abiding place and not disturb the survivors, the latter are accustomed to say at the grave, "We put you here. Go to your home in the East. Do not come back." Ghosts are uncanny things to have about and are liable to touch sleeping persons, this meaning that the one touched must accompany the visitor back to the land of shades.

When a householder died his ki was formerly burned—an excellent hygienic precaution, but detrimental to the development of architecture. The other structures about the premises were either burned or piled on the grave. Personal property was similarly destroyed, and if there was any live stock, it was killed and eaten by anyone who chanced to be on hand, though the immediate relatives never partook

of such food.[a] When a husband was so fortunate as to possess two blankets, his widow sometimes kept one of them. The name of the deceased was not mentioned thereafter, and all things possible were done to obliterate his memory from the minds of the survivors except that the rites of mourning were practised for some time.

The death of a pauper who had nothing to leave at the grave released a vexed soul to wander about until some one in charity placed an offering on the grave. Sometimes the paraphernalia of a medicine-man, when it was not handed down to a successor in the family, was concealed in an olla in the hills instead of being destroyed. More rarely these caches were made of the property of ordinary men. Figure 101 shows such a cache, which was found in a rugged granite hill about 4 miles south of Casa Blanca. The olla was covered with a bowl, and as neither was broken it was perfectly water-tight. Among the contents of the cache (pl. XL) were a number of crystals and concretions, a neatly carved stone rattlesnake, three seashells for use in medicine, and a war club. The last was too large to be placed in the olla, and, being exposed outside, it was somewhat gnawed by rodents.

MOURNING

In mourning for near relatives the men cut their hair so that it does not fall below the middle of the back. The women cut theirs to the level of the ear lobes for husband, child, etc., and an aged widow cropped her hair close to the head "because she felt the worst." In all cases the cut hair was buried in the sand of the river bed; if it were burned it would cause headache and death. And yet when blankets were destroyed at the death of their owner they were burned.

Very few widows mourned for the full period of four years. During that time they were compelled to remain at home, to refrain from washing their hair, and to cry aloud the name of the deceased every morning at daybreak. They were allowed to bring their blankets up around under the armpits, but not over the shoulders, even in the coldest weather. When the chemise was adopted, as the blankets went out of use, it was customary to revert to the blankets during the period of mourning.

SOCIAL ORGANIZATION

OFFICERS

The Pimas are governed by a head chief and by a chief for each village. These men are assisted by village councils, which do not, the author believes, appoint any representatives to the tribal coun-

[a] Compare Bourke. "When a Mohave dies, there is a feast made of some of his horses and other edibles; but none of his clansmen will eat of it." Journal of American Folk-Lore, II, 184.

cils. The office of head chief is not hereditary, though the present incumbent succeeded his father. He is elected by the village chiefs.

The present head chief is Antonio Azul (pl. II, *a*), known among his people as Uva-a'tûka, Spread Leg, from a peculiarity in his gait; also as Ma'vĭt Ka'wutam, Puma Shield, and by other names less elegant. The calendar records are silent upon this, and as to the date of his accession, reference to it in contemporary literature has been seen. He became chief before 1864, as Poston mentions in his report as special commissioner in that year that Antonio had just had his commission revoked for bad conduct.[a]

Antonio's father had been the preceding head chief. He was known as Culo Azul, also as Ti'ahiatam, Urine. His predecessor was Rsân'talĭ Vi'akam, who was killed by Apaches before Kâmâl tkâk, who is probably 75 years old, was born. His predecessor was named O'sĭvf, Joseph. No recollection of any earlier chief remains. In the Rudo Ensayo Tavanimó is named as the chief about the year 1757,[b] and it is possible that he was the predecessor of O'sĭvf.

The decrees of the councils are announced from a house top by the village crier, who is selected because of possessing the loudest and clearest voice. There are sometimes two of these officials in a village.

In each village there was also a "ceremony talker," or master of ceremonies, whose duty it was to arrange and control the details of the festivals and general ceremonies not especially provided for by the religious fraternities.

At the command of each council was a messenger who might be sent to summon those required by that body.

Any man of acknowledged courage might, with the approval of his fraternity (the information obtained at this point was somewhat vague—perhaps "neighbors" or "the community" is the better term), organize a war party. He was then called Tcunyĭm or Tcu'yĭnyĭm, Smoker, or War Speaker. His name and authority ended upon returning from the campaign.

It is important to note that the tribe acted as a unit against the Apaches. With their compact territory and well-developed agriculture they might well have easily developed yet further their division of labor and established a warrior class. Then, with their increasing numbers under the stimulus of material well-being, they might have easily extended their power. No neighboring tribes except the Apaches and Papagos surpassed them in numbers; the former were without resources, the latter were related and friendly. The advantages of confederation had been learned from more than half a century's experience with the Maricopas, a tribe of alien speech and blood.

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[a] See Report of Commissioner of Indian Affairs 1864, 153, 1865.
[b] Records American Catholic Historical Society. v, 129.

GENTES

Descent is traced in the male line and there are five groups that may be called gentes, though they exert no influence upon marriage laws nor do they manifest any evidences of organization so far as ascertained. The names of these groups have lost all meaning. They are called Â'kol, A'pap, A'pŭkĭ, Ma'-am, and Va'-af.

The first three are known as the Vulture or Red People, the last two as the Coyote or White People. However, they are spoken of as the Sûwû'kĭ O'himal and Sto'am O'himal, or Red Ants and White Ants.[a] In the Pima creation myth presented in full in this memoir reference is made to black ants, tcotcĭk tâtâny, and to the termite, hiapĭtc, but no connection is supposed to exist between them and the o'himal.

The Red People are said to have been in possession of the country when Elder Brother brought the White People from the nether world and conquered them as described on page 226. There were more than two gentes of the White People, but Coyote laughed too soon at them and the earth closed before the others got through. The author suspects that this division signifies that the tribe was formed by the junction of two peoples, the only trace of the original groups being the names and the maintenance of the laws of vengeance.

SLAVES

The slaves taken by the Pimas were chiefly from the ranks of the Apaches or their allies.[b] Though war was waged for many years against the Yumas it was not of a character to enable them to capture many Yuma children. When captured, Apache children were not killed; they were soon forwarded to Tucson, Altar, or Guaymas and sold to the Spaniards or Mexicans. These captives were well treated, but their origin was never forgotten and the fear and suspicion of the tribe found expression at times in the decrees of the medicine-men that certain misfortunes were caused by the presence of the aliens. Somewhat rarely the girls were married into the tribe and an appreciable amount of foreign blood was introduced in this way which doubtless had its effect upon the vigor of the race.

SOCIAL MORALS

It would be a more agreeable task to write of the morality of primitive Pimas than of that which developed as a result of contact with Spaniards and Americans. To the honesty and virtue of the tribe a

[a] The same divisions exist among the Papagos, and José Lewis, the Papago who interpreted for Professor McGee, submitted specimens of the ant as examples of the insect referred to as "o'himal."

[b] "Que los Cocomaricopas apressan los muchachos Nijoras (que todos son gentiles) y los venden por esclavos á los mas, y estos á los Españoles, que los compran en cortas cantidades." Villa-Señor, y Sanchez, Theatro Americano, 1748, pt. 2, I, 396.

score of writers have testified, leading to the belief that moral standards in Pimería at least equaled if they did not resemble our own. Life and property were secure. By their industry they had mastered the difficulties of their environment. The relations of the sexes and the division of labor had been adjusted in a manner creditable to them.[a]

The law of vengeance operated to prevent homicide. "Speak not foolishly," said the elders; "do not quarrel and kill your neighbor, for that leads to retaliation." Thus the youth were instructed and the abhorrence of bloodshed grew deep and lasting. Within the tribe there was but one exception to this—to kill the convicted sorcerer was meritorious.

No odium attached to the crime of suicide. The body was buried in the usual manner and the property was similarly divided or destroyed. Several instances of self-destruction were ascertained. A blind old man had shot himself and a young man had ended his career because his father would not let him sell some piece of personal property. Another man had shot himself because his wife had deserted him and their family of small children. A woman had starved herself and baby in the hills of the desert because her husband had left her.

The crime of arson was unknown, though dwellings were frequently burned by accident.

Adultery was punished by turning the woman away from the home. Sometimes the husband shot the horse of the offending man and "then he felt all right."

Prostitution with its train of diseases has not depleted the numbers of the Pimas as it has the population of so many surrounding tribes. Loose women are said by the old people to have been rare in the old days. Independent testimony of the whites accords with this. "They are exceedingly jealous of their females; and their chastity, as far as outside barbarians are concerned, remains, with a few exceptions, unimpeachable."[b] One informant assured the writer's party that the infant daughter of a prostitute by an unknown father was always destroyed lest she "grow up to be as bad as her mother."

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[a] "The Indians, although they were crowding about our tents, and everything was exposed to them, made no effort to steal anything." Captain Johnston, Journal, 600.

"Um das Bild dieses indianischen Volksstammes zu vervollständigen, muss ich nur noch hinzufügen dass derselbe mit seinen friedlichen und liebenswürdigen Eigenschaften eine unbestrittene Tapferkeit verbindet, die selbst dem wilden Apachen Hochachtung einflösst. Ich glaube nicht dass sich bei irgend einem anderen noch erhaltenen Stamme der Charakter der amerikanischen Urbevölkerung auf eine vortheilhaftere Weise darstellt." Julius Fröbel, Aus Amerika, II, 448, 449.

Emory found them "surpassing many of the Christian nations in agriculture, little behind them in the useful arts, and immeasurably before them in honesty and virtue."

"The heathen Indians received us with jubilee, giving of their provision to the soldiers, and we counted two hundred persons, who were gentle and affable." Mange's Diary, from an extract translated by Buckingham Smith in Schoolcraft's Indian Tribes, III, 303.

"These Gila Pimas are gentle and comely." Ibid., 301, from Diary of Pedro Font.

[b] C. D. Poston, in report as special Indian commissioner, in Report of Commissioner of Indian Affairs 1864, 152, 1865.

Theft became a common crime with the increasing vagabondage arising from deprivation due to the whites. An extensive system of horse and cattle stealing grew up, whereby the Papagos stole in Sonora and sold to the Pimas, and the latter stole from one another and sold to the Papagos, who bought or stole to sell again in Mexico.

During the worst period of their demoralization they stole wheat from each other and sold it to buy whisky. It is to be remembered that by far the greater part of the tribe disapproved of such deeds, and the few that engaged in such enterprises had not the support of public opinion, which even in an Indian village is an autocratic power.

Thus intoxication was always regarded as reprehensible, though a distinction was made between the persons guilty of drinking the white man's whisky and those who followed the immemorial custom of getting drunk on native-brewed liquors during the saguaro harvest.

Laziness was condemned, and boys and girls were taught to spin and delve—how well may be judged from the fact that the tribe produced a large surplus crop year after year during the early period of American occupancy of the region and at the same time fought back the Apaches and aided the soldiers materially, while the Americans and Mexicans with all their soldiers and outside resources were driven into the shelter of the forts.

Cleanliness is learned by imitation. The floors of the houses are kept free of such objects as can be picked up with the hands and the yards are swept with bundles of arrow bushes or mesquite branches. Bathing was a daily practice.

Public opinion strongly condemned lying. Stinginess could not be more abhorred. The chiefs, especially, were expected to bestow liberally all gifts within their control. The present chief has had a canny sense of thrift and possesses a large bank account, which renders him much less popular than he might otherwise be.

FORMULAS OF POLITENESS

No conventional words of greeting were in use before the introduction of the Spanish and American forms. Tciârs tam wu'sahaïn, "the god sends his regards," were the closing words of any speech. Hâ'iku-ult, "good-bye," was the usual response of the listeners. Sometimes in finishing a story the narrator exclaimed atoa'tûk, "anus," at which those present said the word expressing the degree of their relationship to the speaker, or if they were not related they said na'wotc, "friend." The same expressions are used in accepting a gift.

Hand shaking was unknown until introduced by the whites, though it is now universally practised.[a] It is said that the custom of kissing

[a] "Antonio and his son had tipped fingers and grunted in token of joy," wrote J. R. Browne, in describing the meeting of the chief and his son after a long separation. Adventures in the Apache Country, 84.

was confined to mothers and infants. Accurate information of the primitive custom can not now be obtained. Formerly, when long-separated friends met they expressed their joy in tears. The terms expressing their degrees of relationship or simply "friend" were sometimes used.

Guests were offered pinole upon arrival if it were not near meal-time. Pinole was easily prepared without cooking and stayed hunger. At meals guests were helped to food in a dish apart from the common bowl out of which the family ate.

Intertribal Relations

ALLIANCES

The relations of the Pimas to their neighbors had a profound influence upon their social organization and general cultural development. They held possession of the best agricultural lands in their section of the Southwest, and were compelled to fight for the privilege. Their alliance with the Maricopas entailed a long and sanguinary struggle with the Yumas, which resulted in what Bancroft has termed "the almost total annihilation" of the latter tribe. From the Maricopas they received, however, efficient aid against their principal enemy, the Apaches. Thus the Pimas learned the advantages of confederation, and there is reason to believe that their culture, based on a thrifty system of agriculture, in time might have surpassed that of the Hohokam. The Yavapais were sometimes hostile, but do not appear to have been very formidable opponents.[a] In the Annals there are references to a few tribes of minor importance that it is almost impossible to identify from their Pima names, but they were always allied with either the Yumas or the Apaches. Aside from the Maricopas, the tribes friendly to the Pimas were their congeners, the Papagos and Kwahadk's and the Sobaipuris of the Santa Cruz and San Pedro valleys.

WARFARE

Raids

A better understanding of the division of labor prevailing among these people may be had by studying the conditions imposed upon them by the presence of the aggressive Apaches. The men may be forgiven for allowing the women to perform certain tasks in the cultivation of the crops that are usually considered the portion of the stronger sex when it is learned that this plan was necessary in order to maintain pickets constantly for long periods, and that an armed guard was the sole guaranty of safety to the villages. Every three

[a] Garcés relates in his Diary that the "Yabipais Tejua," [Yavapais] have "in some way remained enemies of the Pimas and Cocomaricopas Gileños." Coues', On the Trail of a Spanish Pioneer, II, 449.

or four days small parties of five or ten would come to steal live stock or to kill any individual that might have gone some little distance from the villages. Larger war parties came once or twice a month, though longer periods sometimes elapsed without a visit from the Apaches. Chief Antonio declares that the Apaches formerly lived farther away from the Pimas, and hence their raids were less frequent than they were during the middle portion of the last century. At all events the activity of the enemy became sufficient to cause the abandonment of the outlying villages east of the present agency of Sacaton and the concentration of the tribe into seven villages upon the Gila plain. On stormy winter nights, when the noise of the elements might afford cover for the approach of the enemy, sentinels were posted about the camps. These men were accustomed to build little shelters of brush and leave smoldering fires in them, then conceal themselves in the darkness near by and watch for marauders that might attempt to steal toward the light. In this way the main trails were guarded, and the coyote-like curs at the houses afforded additional security from surprise. They supposed that the Apaches always guarded their own camps.

When a chief "felt in his heart" that he would like to avenge his people for some particularly flagrant outrage, or that he desired the honors that reward the successful warrior, he went from settlement to settlement making an appeal for followers by repeating conventional speeches of magic character. The arrangements for the campaign were speedily made. The preparation of the roasted meal for pinole required much less time than the ceremonies necessary to secure the requisite amount of magic power to insure victory. The extra supplies of food were carried, before the introduction of the horse, by one or more women. These women were chosen from those who had recently lost kinsmen in battle and they were invariably accompanied by a male relative. At night the party was surrounded by pickets, who came in to report at intervals. During the evening a set speech was repeated by a man whose office it was to keep appropriate speeches in memory. These were arranged in order, as "first night," "second night," etc., and were "adapted" for the occasion, though based upon the supposed speeches of the gods at the time of the creation. The valor of the party was roused by the recital of deeds performed, but the primary object was to compel the attention of supernatural beings and secure magic power that would not only enable them to overcome but would also attack the magic power of the enemy. Then, of course, if the magic power of the enemy were defeated, the Pimas could easily overpower the Apaches.[a] After the speech the warriors sang the magic war songs, a′-atăn nyuĭ, while the

[a] "The Pimas, though not an aggressive, are a brave and warlike race. They are the dread of the Apache, who always avoids them." Sylvester Mowry in S. Ex. Doc. 11, pt. 1, 587, 35th Cong., 1st sess., 1858.

makai, or magician, swung an owl feather over them. At the close of the songs he foretold the number of the enemy that would be killed. Thus they fared forth, carrying a little roasted meal and a small but shapely basket bowl from which to eat it, provided with a little tobacco for the ceremonial smokes that wafted their individual prayers to the Sun god. A portion of each band was armed with bows and arrows; the former of the elastic mulberry wood from the same mountains in which the enemy found refuge, the latter of the straight-stemmed arrow bush, whose tufted tips waved in billowy masses on the Pimerían lowlands. When a comrade fell in battle his bow was broken and his arrow shafts were snapped and left upon the spot. Oftentimes the body of a man killed in battle was burned, though this method of disposal of the body was never employed at the villages. It may have been a survival from the time when the Pimas lived on the Colorado or it may have been recently adopted from the Maricopas, who habitually cremate their dead. On the homeward journey no fires were allowed for cooking or warmth, though with due precautions they might be built on the outward trail. Another portion of the war party was provided with circular shields of rawhide and short but heavy clubs of mesquite and ironwood. Their appeal to the God of War was expressed by the sun symbols that decorated the shields, and the latter were kept swiftly rotating upon the supple forearms of their bearers as the advance was made for hand-to-hand conflict. The frequent use of the figure, "like predatory animals or birds of prey," in the ceremonial speeches imbued all with the spirit of agility and fierceness that manifested itself in the leaps from side to side and the speed of their onward rush. Crouching low, springing quickly with whirling shield that concealed the body, in feather headdress and battle colors, they must have presented a terrifying spectacle.[a] Their courage can not be questioned, and in some conflicts, of which there is independent white testimony, they killed several hundred warriors. But these were rare occasions, and their raids usually terminated with the loss of a man or two and the destruction of an Apache camp, with perhaps a half dozen of the enemy killed and a child taken prisoner.

The head chief, Antonio Azul, thus described to the author the circumstances of his first campaign: With 30 friendly Apaches from the San Xavier settlement, 200 Papagos, and about 500 Pimas he went up the Gila a distance of about 50 miles and encountered the enemy in the rough country around Riverside. The Apaches tied the bushes together to prevent the mounted warriors from getting

[a] "In battle the Indians are not quiet for a moment, but, with constantly bended knees, leap rapidly from side to side, waving their shield and its long streamers, for the purpose of dazzling the eyes of their adversaries. Apaches are said to oil their joints before going to battle, in order to make them supple." Whipple, Ewbank, and Turner, Report upon the Indian Tribes, in Pacific Railroad Reports, III, 30.

through, so that the Pimas fought on foot. Without the advantage of surprise the ardor of the latter soon cooled, and being of divided opinion as to the advisability of pursuit, they permitted the enemy to escape with a loss of but 6. Then this by no means inconsiderable body of warriors marched bravely home again. Further accounts of more sanguinary struggles are given in The Narrative, in the present paper, page 38.

Three Pima women known to Sika'ʿtcu went out on the mesa to gather cactus fruit. Another woman was asked to accompany them, but at first she refused to go because she had had a bad dream. After the others had started she set out to follow them and ran into a trap set for them at the hills south of the villages. The four captives were forced to walk naked before their enemies. Two were soon killed by the wayside. That night two Apaches were detailed to watch the other two women. These men relaxed their vigilance toward morning, whereupon the captives gathered all the bows and arrows of the party and threw them over the cliff. They also tried to strangle their captors and partially succeeded. They then made their escape. One of these brave women is yet living.

It was customary for the Pimas to attack the Apaches at night or at the earliest dawn. This required careful scouting during the preceding day in order to locate the position of the enemy, who were always at least equally alert and wary, without betraying their own presence.

On one of their raids toward the east a war party came upon a young Apache and his wife in the Sierra Tortilla. The man escaped, but the woman, named Hitalu'ɪ, was captured and brought to the villages, where she was questioned through Lâ'lâlɪ, an Apache woman who had been captured in childhood. The chief asked about the attack that had recently been made upon a party of Pimas at Ta-a'tû-kam. She replied, "I shall tell you the truth about that. I shall never take my life to my people again. I am here to my death." She was soon led to the open ground east of the Double buttes, where a death dance was held with the captive in the center of a group of old women, for it was not dangerous for them to touch the Apache. Outside the old women the other members of the community danced until at length the victim was killed by an old man who stepped upon her throat. The body was tied to a pole in an upright position and left as a warning to Apache prowlers.

These raids were not infrequent, but they could hope to reap no better reward for their efforts than revenge for past injuries, whereas the Apaches were spurred on to constantly renewed attacks for the sake of the plunder that they might secure. Thus the feral pauper preyed upon the sedentary toiler, but paid dearly in blood for his occasional prize of grain or live stock. The effect upon the two tribes

of so strenuous a life was beginning to manifest itself in an interesting manner at the time of the intervention of the Americans. The Spaniards and Mexicans had shown their utter incapacity to cope with the Apaches, and their presence in Sonora was rather an aid to the enemy than otherwise. The Pimas were compelled to fight their own battles. In doing so they learned the advantage of concentrating their fields. They perfected a system of attack, appointed runners for bringing in assistance, and organized a fairly satisfactory method of defense. They never used smoke signals except to announce the victory of an incoming war party. They kept themselves constantly in fit condition by their campaigns, and even engaged in sham battles for the practice. These have been held within the last decade at the lower villages on the reservation. Their daily duties were ordered with reference to the possibility of attack. Their arts were modified by the perpetual menace. Their myths were developed and their religion tinged by the same stress. In short, the Pimas were building up a war cult that in time might have led them from the lethargic state in which the natural environment tended to fix them.

Lustration

There was no law among the Pimas observed with greater strictness than that which required purification[a] and expiation for the deed that was at the same time the most lauded—the killing of an enemy. For sixteen days the warrior fasted in seclusion and observed meanwhile a number of tabus. This long period of retirement immediately after a battle greatly diminished the value of the Pimas as scouts and allies for the United States troops operating against the Apaches. The bravery of the Pimas was praised by all army officers having any experience with them, but Captain Bourke and others have complained of their unreliability, due solely to their rigid observance of this religious law.

Attended by an old man, the warrior who had to expiate the crime of blood guilt retired to the groves along the river bottom at some distance from the villages or wandered about the adjoining hills. During the period of sixteen days he was not allowed to touch his head with his fingers or his hair would turn white. If he touched his face it would become wrinkled. He kept a stick to scratch his head with, and at the end of every four days this stick was buried at the root and

[a] "All savages have to undergo certain ceremonies of lustration after returning from the war-path where any of the enemy have been killed. With the Apaches these are baths in the sweat-lodge, accompanied with singing and other rites. With the Pimas and Maricopas these ceremonies are more elaborate, and necessitate a seclusion from the rest of the tribe for many days, fasting, bathing, and singing. The Apache 'bunches' all his religious duties at these times, and defers his bathing until he gets home, but the Pima and Maricopa are more punctilious, and resort to the rites of relig.on the moment a s.ngle one, either of their own numbers or of the enemy, has been laid low." John G. Bourke, On the Border with Crook, New York, 1891, 203.

on the west side of a cat's claw tree and a new stick was made of greasewood, arrow bush, or any other convenient shrub. He then bathed in the river, no matter how cold the temperature. The feast of victory which his friends were observing in the meantime at the villages lasted eight days. At the end of that time, or when his period of retirement was half completed, the warrior might go to his home to get a fetish made from the hair of the Apache whom he had killed. The hair was wrapped in eagle down and tied with a cotton string and kept in a long medicine basket. He drank no water for the first two days and fasted for the first four. After that time he was supplied with pinole by his attendant, who also instructed him as to his future conduct, telling him that he must henceforth stand back until all others were served when partaking of food and drink. If he was a married man his wife was not allowed to eat salt during his retirement, else she would suffer from the owl disease which causes stiff limbs. The explanation offered for the observance of this law of lustration is that if it is not obeyed the warrior's limbs will become stiffened or paralyzed.

Dance in Celebration of Victory

Upon the return of a victorious war party the emotions of those who had remained at home in anxious waiting and those who had returned rejoicing were given vent in vigorous shouting and dancing. It is interesting to observe that the abandonment of these occasions was not wholly approved by the leaders, as is shown by the invariable formula that closed every war speech that was delivered while the party was on the campaign: "You may think this over, my relatives. The taking of life brings serious thoughts of the waste; the celebration of victory may become unpleasantly riotous." Throughout the ceremonies the women of the tribe play a prominent part, particularly in mourning for relatives if any have fallen victims to the attacks of the Apaches.

The dance was held on the low rounded hill near the Double buttes (see pl. XLI, *a*), or on a hill near the railway siding called Sacaton, or upon some alkali flat which the deposits of the rainy season leave as level and the sun bakes nearly as hard as a floor. Sometimes the dance was held on any open ground about the villages. Four basket drums were beaten in the center, while either four or ten singers formed a close circle around them. Within a larger circle numerous appointed dancers stamped and swayed their bodies, moving ever in a sinistral circuit. Sometimes the crowd danced within the circle of selected dancers, in which case they danced as individuals without holding hands; but usually they remained outside the circle. Outside the circle of spectators twenty men and two or more young women,

according to the number of female relatives of those killed in battle kept running. In addition to these forty horsemen also circled from left to right about the whole gathering.

SOPHIOLOGY

Myths

The traditions of the Pimas are kept by those who show special aptitude in remembering them and who gradually become recognized as the tribal historians. To them the boys are regularly sent that they may listen for four nights to the narrative of how the world was made and peopled; whence the Pimas came and how they struggled with demons, monsters, and savage enemies. These tales are not usually told in the presence of the women, and consequently they know only imperfect fragments of them.

The myths are not related in the summer because of the fear of being bitten by rattlesnakes, which of course hibernate. No information was obtainable that the Pimas believe that the snakes then carry venom, nor why the snakes should bite those who disregard the tabu. The Pimas do not hesitate to kill rattlesnakes except in certain cases.

TCΩ-ÛNNYIKITA,[a] THE CREATION MYTH

In the beginning there was nothing where now are earth, sun, moon, stars, and all that we see. Ages long the darkness was gathering, until it formed a great mass in which developed the spirit of Earth Doctor, who, like the fluffy wisp of cotton that floats upon the wind, drifted to and fro without support or place to fix himself. Conscious of his power, he determined to try to build an abiding place, so he took from his breast a little dust and flattened it into a cake. Then he thought within himself, "Come forth, some kind of plant," and there appeared the creosote bush. Placing this in front of him, he saw it turn over as soon as his grasp upon it relaxed. Advancing toward it, he again set it upright, and again it fell. A third and yet a fourth time he placed it, and then it remained standing. When the flat dust cake was still he danced upon it, singing:

Earth Magician shapes this world.
  Behold what he can do!
Round and smooth he molds it.
  Behold what he can do!

Earth Magician makes the mountains.
  Heed what he has to say!
He it is that makes the mesas.
  Heed what he has to say.

[a] "Smoke talk," from tcu-utc, smoke, and nyiâk, talk. This myth is also called Hâ-âk Akita, "Hâ-âk Telling."

Earth Magician shapes this world;
  Earth Magician makes its mountains;
Makes all larger, larger, larger.
  Into the earth the magician glances;
Into its mountains he may see.

Next Earth Doctor created some black insects, tcotcĭk tâtâny, which made black gum on the creosote bush. Then he made hiapitc, the termite,[a] which worked upon and increased the small beginning until it grew to the proportions of our present earth. As he sang and danced the wonderful world developed, and then he made a sky to cover it, that was shaped like the round house of the Pimas. But the earth shook and stretched so that it was unfit for habitation. So Earth Doctor made a gray spider, which he commanded to spin a web around the unconnected edges of earth and sky. When this was done the earth grew firm and solid.

All that we now see upon the land—water, mountains, trees, grass, and weeds—was made, and then he made a dish, poured water into it, and the water became ice. Taking this block of ice he threw it toward the north, where it fell at the place where earth and sky forever meet. At once the ice shone forth as the brilliant disk we now know as the sun. For a certain distance the sun rose into the sky and then fell back again. Earth Doctor took it and threw it toward the west, where earth and sky are sewn together, and again it rose and slid back into the ground. And in the south it behaved in a similar manner, but when he threw it to the east it rose higher and higher, until it reached the zenith, and then went on to sink in the west, and thus it has continued to do until this day. As the evening glow grew dim the darkness fell in inky blackness. So Earth Doctor poured more water into the dish and it became ice, and he sang:

I have made the sun!
  I have made the sun!
Hurling it high
  In the four directions.
To the east I threw it
  To run its appointed course.

Then to the north he threw the ice until it dropped at the edge where the earth and sky are woven together. It became the shining circle which we call the moon. The moon rose in the sky, but soon fell back as the sun had done, so he threw it to the west, and then to the south, and finally to the east before it rose and pursued its course across the sky as it does to the present time.

[a] Termes flavipes Koll. It was formerly believed that if anyone ate food prepared from grain that was contained in anything upon which this insect lived that person's teeth would fall out.

Then he sang:

I have made the moon!
  I have made the moon!
Hurling it high
  In the four directions.
To the east I threw it
  To run its appointed course.

Earth Doctor saw that while the moon was yet above the horizon there was sufficient light, but when it disappeared the darkness was intense, so he took some of the water in his mouth and blew it into the sky in a spray, which formed the stars, but the night was still dark. Then he took his magic crystal and, after breaking it, threw it also into the sky to form the larger stars, so the darkness was less intense. Then he sang:

I have made the stars!
  I have made the stars!
Above the earth I threw them.
  All things above I've made
And placed them to illumine.

Next he took his walking stick, and placing ashes on the end he drew it across the sky to form the milky way.

When the earth was thus prepared for habitation, Earth Doctor created all manner of birds and creeping things. Next he formed images of clay, which he commanded to become animate human beings, and they obeyed him. For a time they increased and overspread the earth until it became so populous that food became scarce and there was not sufficient water to supply their needs. Of sickness and death they knew nothing, and their numbers grew apace. Hungering, they began to kill one another and to eat human flesh. Earth Doctor pitied them in their extremity, but could devise no plan for relieving their distress, except to destroy all, and this he at length felt forced to do.

Earth Doctor said: "I shall unite earth and sky; the earth shall be as a female and the sky as a male, and from their union shall be born one who will be a helper to me. Let the sun be joined with the moon, also even as man is wedded to woman, and their offspring shall be a helper to me." Then he caught the hook of his staff into the sky and pulled it down, crushing to death the people and all other living things. Thrusting his stick through the earth, Earth Doctor went through the hole and came out alone on the other side. He called upon the sun and moon to come forth from the wreck of world and sky, and they obeyed him. But there was no sky for them to travel through, no stars nor milky way, so he created all these anew. Then he called for the offspring of earth and sky, but there was no response. Then he created a race of men, as he had done before; these were the Rsâsanatc.

Out in the west beneath the toahafs bush the moon gave birth to Coyote and then went down. Coyote grew apace, and when large and strong he came to the land where lived the Pima nation.

After a time the earth gave birth to one who was afterwards known as Itany and later as Siuuhû, Elder Brother. He came to Earth Doctor and spoke roughly to him, and Earth Doctor trembled before his power. The people increased in numbers, but Elder Brother shortened their lives, and they did not overrun the earth as they had done before. But this did not satisfy Elder Brother, who announced to Earth Doctor that he would destroy the latter's people, and this is how he accomplished the second destruction of the world:

Elder Brother created a handsome youth, whom he directed to go among the Pimas, where he should wed whomsoever he wished.

He must live with her until his first child was born, then leave her and go to another, and so on until his purpose was accomplished. His first wife gave birth to a child four months after marriage and conception. The youth then went and took a second wife, to whom a child was born in less time than the first. The period was yet shorter in the case of the third wife, and with her successors it grew shorter still, until at last the child was born from the young man at the time of the marriage. This was the child that caused the flood which destroyed the people and fulfilled the plans of Elder Brother. Several years were necessary to accomplish these things, and during this time the people were amazed and frightened at the signs of Elder Brother's power and at the deeds of his agent. At the time of the commencement of these strange events Elder Brother began to make a jar or olla of some substance, either bush or gum. When this should be finished the flood would come. How? This is the way in which it came: The handsome young man, whom Elder Brother sent about among the people to marry and beget children in so short a period of time, came at last to the home of Vakolo Makai, South Doctor, who lived somewhere in the south, and who had power similar to that of Elder Brother. South Doctor was noted for his knowledge of all things and his skill in reading signs. He declared that he would put an end to Elder Brother's schemes. One day South Doctor asked his beautiful young daughter why she cried all the time. She replied that she was afraid of the handsome young man who went about marrying the young women and begetting sons and daughters. Her father told her that it was her duty to marry the young man in order that a divine plan might be accomplished. But she continued crying, so her father told her to fetch some of the topmost thorns of a cholla cactus. When she had obeyed him he placed the thorns upon her, telling her not to be afraid of the young man, but that when he

came she should take good care of his bow, arrows, shield, war club, spear, or any other weapon he might bring. At this the maiden dried her tears and awaited with pleasure the bridegroom's coming. When he came she took his bow and arrows and carefully put them in a safe place. After exchanging good wishes for health and happiness, they went to the dwelling prepared for them. Soon the screams of a child aroused old South Doctor and his wife, who came running, desirous of seeing their grandchild. The old woman took up the babe and tried to present it to her daughter, but she refused to accept it, saying, "I am not the mother. He gave birth to the child. Give it to him." So the young man took the child away and returned to Elder Brother, but as he was very much ashamed of himself, he did not bring the baby, but left it by the wayside. Elder Brother knew what was happening, for he was finishing his olla. As the youth approached he asked, "How does it happen that you come alone and do not bring the young child that is born of you? Go bring it hither, and we will take care of it. We have been outwitted and our plan defeated, but that is the best we can do." The young man went after the child, the screams of which shook the earth and could be heard for a great distance. Earth Doctor then called his people together and told them there would be a great flood. After describing the calamity that would befall them, he sang:

Weep, my unfortunate people!
All this you will see take place.
Weep, my unfortunate people!
For the waters will overwhelm the land.
Weep, my unhappy relatives!
You will learn all.
Weep, my unfortunate relatives!
You will learn all.
The waters will overwhelm the mountains.

He thrust his staff into the ground, and with it bored a hole quite through to the other side of the earth. Some of the people went into the hole, while others appealed to Elder Brother. Their appeals were not heeded, but Coyote asked his assistance, and he was told to find a big log and sit upon it. This would carry him safely on the surface of the water along with the driftwood. Elder Brother got into his olla and closed the opening by which he entered, singing in the meantime:

Black house! Black house! Hold me safely in;
Black house! Black house! Hold me safely in,
As I journey to and fro, to and fro.

As he was borne along by the flood he sang:

Running water, running water, herein resounding,
As on the clouds I am carried to the sky.
Running water, running water, herein roaring,
As on the clouds I am carried to the sky.

When he finally emerged from the olla he sang:

Here I come forth! Here I come forth!
With magic powers I emerge.
Here I come forth! Here I come forth!
With magic powers I emerge.

I stand alone! Alone!
Who will accompany me?
My staff and my crystal
They shall bide with me.

The young man went to the place where he had left the child and found that its tears were welling up in a great torrent that cut a gorge before it. He bent over the child to take it up, but at that moment they both became birds and flew above the earth over which the floods were spreading. It is said that five birds in all were saved from all those that had been previously known. These were Kolivĭtcûkam' Hikĭvĭk (flicker), Vĭpisimal, Kisŏpĭ, and Nyuĭ (vulture). They clung by their beaks to the sky to keep themselves above the waters, but the tail of the flicker was washed by the waves, and that is why it is stiff to this day. Finally, as they were threatened with destruction, the god Vikârskam took pity on them and gave them power to make "nests of down" from their own breasts which floated on the surface of the waters and so enabled them to survive the flood. If anyone harms the little Vĭpisimal to this day the flood may come again. Accidental injuries to the bird must be atoned for; if it be killed, its tail feathers must be kept for a time to avert disaster; if it is found lying dead, it must be buried and appropriate gifts must be placed upon its grave.

When the child had been taken from them, South Doctor called the people to him and announced that a flood was coming to destroy the earth and all things thereon. Then he sang:

The waters dissolve the land.
The waters dissolve the land.
The mighty magician tests his strength.
The waters dissolve the mountain.
The waters dissolve the mountain.
Nasi foresees what is coming.

Some of the people came to him and were saved from the flood by passing through to the other side of the earth by means of the hole which he had made with his cane. He told the others to go with him to Earth Doctor and hear what he might say to them. Earth Doctor told them that they were too late in coming, that he had already sent all that he could save to the other side of the earth. However, there was yet hope for them if they would climb to the summit of the Crooked mountain. He gave power to South Doctor and directed him to aid the people to the extent of his ability, so the

latter conducted the people to the top of the Crooked mountain, and as they went away Earth Doctor sang:

Haiya! Haiya! Flood! Flood! Hai-iya!
See the doom awaiting them!
Haiya! Haiya! Flood! Flood! Hai-iya!
Here are my doomed people before me.

As the flood rose toward the top of the mountain, South Doctor sang a song which caused the mountain itself to rise higher and ever higher above the waters which raced toward them as if on the level plain. These are the words that lifted the mountain upward:

On the Crooked mountain I am standing,
Trying to disperse the waters.
On the Crooked mountain I am standing,
Trying to disperse the waters.

When he ceased singing he traced a line around the mountain and this marked the limit of the flood for a time, but it soon rose again and threatened to overflow the summit. Again South Doctor sang:

On the Crooked mountain top I'm standing,
Trying to disperse the waters.
On the Crooked mountain top I'm standing,
Trying to disperse the waters.

Four times he sang and raised the mountain above the rising waters and then declared that he could do so no more, for his power was exhausted. He could do but one more thing for them, and holding his magic crystal in his left hand he sang:

Powerless! Powerless!
Powerless is my magic crystal!
Powerless! Powerless!
I shall become as stone.

Then he smote with his right hand and the thunder peal rang in all directions. He threw his staff into the water and it cracked with a loud noise. Turning, he saw a dog near him, and this animal he sent to see how high the tide had risen. The dog turned toward the people and said, "It is very near the top." When the anxious watchers heard the voice they were transfixed in stone; and there to this day we see them as they were gathered in groups, some of the men talking, some of the women cooking, and some crying.[a]

[a] Pedro Font has given the following version of this myth in his Diary, pages 23 to 24a of original manuscript: "He further said that after the old man, there came to that land a man called El Bebedor (the Drinker), who became incensed with the people dwelling there and sent so much water that it covered all the land. He then set out for a mountain ridge, which may be seen from that place, called the Ridge of Foam, whither he brought with him a little dog and a coyote. This ridge is called the Ridge of Foam, because at its summit, which ends gradually and accessible after the fashion of the edge of a bastion, may be descried near the very top a white crest like a cliff, which follows horizontally along the ridge for a good space. The Indians say that this is a mark of the foam of the waters which reached that height. The Bebedor remained above and left the dog below, so that he might warn him when the waters reached that height. When the waters rose to the crest of foam, the beast warned the Bebedor (for in those days animals could speak) and the latter raised him up from below. A few

Coyote was carried southward by the drifting log to the place where all the driftwood of the flood was collected. To this day the place is referred to as Driftwood mountain, though its exact location is not known. Coyote came out of the drift after the water had fallen.

Earth Doctor escaped destruction by inclosing himself in his reed staff, which floated upon the surface of the water. We do not know what adventures befell him, but suppose that his staff came to rest somewhere in the east, as he is next heard from in that quarter.

Elder Brother was rolled along on the ground under the waters in his olla and finally came to rest beyond Sonoita, near the mouth of the Colorado river. The olla, now called Black mountain, may be seen there to this day. It is black because the gum from which the vessel was made was of that color. After the waters disappeared Elder Brother came out and went about until he had visited nearly all parts of the land. At length he met Coyote and Earth Doctor. Each claimed to have been the first to appear after the flood, but finally Elder Brother was admitted to have been the first, and he became the ruler of the world, and is accepted as such by many to this day. Elder Brother on becoming the chief ruler told his subordinates to search for the center of the land, which is known as hĭk, navel. He sent Earth Doctor to the east and Coyote to the west. The latter returned first, and a long time afterwards Earth Doctor came in. They all went some distance east and again the messengers were sent out—Coyote east and Earth Doctor west. This time Earth Doctor returned first, so they all journeyed yet farther east before sending out the messengers. Coyote was sent west this time and again returned first. Then all moved east a little farther, and

days later the Bebedor sent the Humming-bird (Sheparosas) and the coyote to bring him mud, and when it was brought he made from it various men, some of whom turned out good and others bad. These men spread over the land up and down the river. Not long afterwards he sent some of his men to see if those who dwelt up the stream could speak. They set forth and shortly returned, saying that although they spoke, they could not understand what they said. At this the Bebedor was greatly incensed, namely, that those men should speak without having received his permission. Thereupon he sent other men downstream to look after those who were there. They returned, saying that they had been well received and that the people there spoke another language, which, however, they had been able to understand. Then the Bebedor told them that the men who dwelt downstream were the good men, who extended as far as the Opas, with whom they were friendly; and that the others who dwelt upstream were the bad men and were the Apaches, their enemies. The Bebedor once grew wrathful with the people and slew many of them, converting them into Saguaros in that land. The Saguaros is a green trunk, aqueous, of fair height, of uniform circumference, and perfectly straight from its base to its top, with rows of thick thorns which extend along its whole length and usually with two or three branches of the same shape which look like arms. Once again did the Bebedor become wrathful against men and caused the sun to descend to burn them. Thus they were on the point of being destroyed when the men entreated him earnestly not to burn them. Then the Bebedor said he should not now burn them, and ordered the sun to ascend once more, but not to such a distance as before, saying that he left it lower down in order that he might burn them with it if they should again anger him. For this reason it is so hot in that land during the summer. At this point he added that he knew other stories which he could not relate because the time did not permit, and he agreed to relate them to us another day. But inasmuch as we made some fun of his stories, which he told quite seriously, we could not afterwards persuade him to tell us anything else; for he kept saying that he knew no more. All this story I have related in the phraseology you have doubtless noticed in order better to adapt it to the fashion in which the Indians explain it."

from that point both returned at the same time, so they knew they were at the middle of the land.

This is the song that Elder Brother sang when they reached the middle:

Here I have come to the center of the earth;
Here I have come to the center of the earth.
I see the central mountain;
I see the central mountain.

He then bent down and scratched his head. The lice that dropped became ants, which dried up that particular spot in a very short time, for the earth had been everywhere wet and muddy. Then they all sat down to create the various animals that had lived before the flood. Elder Brother sat facing the west, for, said he, "I came out upon the earth in the west and I am going to face that way." Coyote sat facing the south, for "I came out in the south and I am to face that way." Earth Doctor seated himself facing the east, for, said he, "I came out in the east and I am going to face that way." Each agreed not to look at what the others were making nor to tell what he was doing until all was finished, and then all that they had made should be showed at once. A moment later Elder Brother said he was ready and asked the others to show what they had made. So Coyote and Earth Doctor brought their work before him. Coyote had made all the web-footed animals, snakes, and birds. Earth Doctor had made creatures resembling human beings, but they were deformed—some having but one leg, others immense ears, some with imperforate bodies, others with flames of fire in their knees.[a]

Elder Brother told Coyote to throw the animals which he had created into the water. He told Earth Doctor to place his creatures in the west. Both obeyed. After throwing his beings into the west Earth Doctor sank into the earth, but while his body was yet halfway down Elder Brother jumped and tried to grasp it. He was not successful, and Earth Doctor disappeared. Elder Brother in trying to hold Earth Doctor got his hands covered with dirt and blood, like those of a man killing an animal. He shook his hands and the blood sprinkled over all the earth. That is what causes all kinds of sickness among us now, for the diseases were scattered over the land and in the water.

Elder Brother and Coyote were left in possession of the land. After the images which the former had made had been kept for four days, one of the Apache group (they were divided into equal groups) came to life and said, "It's very cold," and began to sway its body back and forth. Earth Doctor said, "Oh, I didn't think you would be the first to awake!" and he was so angry he took all the Apaches

[a] There is no generic name for these monsters. Earth Doctor is supposed to have created them thus in order that they might not become rivals to his underworld people for the possession of the earth.

up in his hand and threw them over the mountain. That made them angry, and that is why they have always been so fierce.

These were the Indian people of which there were four tribes: The Wä-akĭ Âp,[a] the Apaches, the Maricopas, and, lastly, the Pimas, though they were given superior qualities—such as a knowledge of the seasons, the power to bring down rain from the sky, the ability to cure sickness, and the like.

These people occupied this country from that time forward and multiplied in numbers. The Yumas and Maricopas were at first united, but the Maricopas left the Yumas and joined the Pimas, finally settling in the Salt River valley, where they formed permanent settlements. They tried to build canals, but were not successful, on account of the hard rocks and soil.

The Maricopas asked Elder Brother for advice or assistance. He caused the ground to become soft for a while, but it hardened again, and upon being appealed to a second time he said he could do no more for them, but told them to go and see Toa'koă-atam Âks, White-eater-old-woman, Elder Brother's sister, who also had great power. She finished all the work in a single night, but Elder Brother refused to do anything more for the people. From that time on he began to do mischief, such as marrying the young women and then deserting them for others. The people began to be jealous of him and planned to destroy him.

For a time after the creation of the four tribes of men and the animals they were confined in a great house together. Rattlesnake was there, and was known as Mâ'ik Sol'atc, Soft Child. The people liked to hear him rattle, and little rest or peace could he obtain because of their continual prodding and scratching. Unable to endure it longer, he went at last to Elder Brother to ask help of him. Elder Brother took pity upon him and pulled a hair from his own lip to cut in short pieces to serve as teeth for Soft Child. "Now," said he, "if anyone bothers you again, bite him." In the evening Tâ-âpi, Rabbit, came to Soft Child as he sat at the door and scratched him as he had so often done before. Soft Child raised his head and bit his tormentor as Elder Brother had instructed him to do. Feeling the bite, Rabbit scratched Soft Child again, and again was bitten; then he ran about telling that Soft Child was angry and had bitten him twice. Again he went to him and again he was bitten twice. During the night his body swelled and the fever came upon him. All through the dark hours he suffered and throughout the next day; often he called to those around him to prepare a place that might give him rest. No bed that they could make brought any ease to his stricken frame. He asked for sea sand that he might lie upon it and cool his

[a] "Go in Ap." An unknown tribe that is believed by the Pimas to have lived somewhere in the northwest, perhaps the Hualapis [Walapai.]

fevered body. Coyote was sent to the sea to fetch the cooling sand, but it gave no relief. Rabbit asked for a shade of bushes that the cooling breeze might blow beneath them upon him, but this, too, failed to help him. The traveling shade likewise brought no relief. His agony increased until death came to give him peace.

For this first loss of life the people blamed Elder Brother, because he had given Soft Child the teeth that made him a menace to all who approached him. The disposal of Rabbit's body formed a serious problem to the tribes, for they feared the interference of Coyote. Said one, "If we bury him Coyote will surely dig him out." "If we hide him," said another, "Coyote will surely find him." "If we put him in a tree," said a third, "Coyote will surely climb up." Finally the Maricopas proposed that he be burned, and in order to get Coyote out of the way during the ceremony he was sent to Sun to get some fire, for he always kept the flame lighted in his house.[a]

As soon as Coyote had gone the people called upon Tcu-utak(i) Moaaɫt, Blue Fly, to help them, and this is how the first fire drill was made. Taking a stick like an arrow, he twirled it to and fro between his hands, the lower end resting in a socket at the margin of a flat stick that lay upon the ground. Soon smoke ascended, and the first fire began to glow. Gathering fuel, they proceeded to burn the corpse.

When Coyote left them he was suspicious of their intentions, and said to himself, "I think they have some purpose in sending me away." So he looked back frequently as he went along, and soon saw the smoke ascending. With excited heart he turned and ran back as fast as he could go. When he made his appearance the people formed a circle and tried to shut him away from the burning body. "Let me see my brother! Let me see with one eye!" he cried as he rolled upon the ground. No one would listen to him, so he ran round and round the circle seeking an opening. There was a weak spot in the cordon where two short men were standing, and he jumped over their heads, bit out the heart of the burning body, and ran away with it. The people pursued, but Coyote outstripped them. South of the Sierra Estrella Coyote stopped and laid the heart upon the an bush, but the people came up and he fled again. To this day that halting place is called Anûkam Tcukwoanyĭk, Place of the

[a] "When Matyavela died, Mustam-ho, by his direction, started in to cremate him. The Coyote wanted to eat the corpse. At that time there was no fire on earth. The Blue Fly put a star in the sky; 'Go over there and get me some of that fire,' he said to the Coyote. The Coyote was fooled, and scampered off to bring in the star. He didn't know that the Blue Fly had learned the art of rubbing sticks together and making fire. While he was gone the Blue Fly made a big fire and Matyavela was burnt up.

"The Coyote happened to look back; he saw the blaze, and knew that something was up. He came back on the full run. All the animals were present at the funeral; they saw the Coyote returning, and formed a ring round the fire to keep him away from the corpse.

"The Coyote ran round the ring until he came to the Badger, who was very short. The Coyote jumped over him, seized the heart of Matyavela, which was the only part not burnt up, and made off with it. He burnt his mouth in doing this, and it's black to this day." John G. Bourke, Notes on the Cosmogony and Theogony of the Mohave Indians of the Rio Colorado, Arizona, Journal of American Folk-Lore, II, 188.

Uprooted An Bush. Near Kihâtoak' he stopped again upon a mountain to eat the heart, but he saw that it was covered with ashes, so he shook it and the ashes fell and covered the mountain, so that it is white to this day, and is called Gray mountain. Again the people overtook Coyote, and he ran northward across the Gila, where he ate the heart, and as he did so the grease fell upon every stone of the mountain, which accounts for its appearance and the name it bears to this day—Mo'hatûk, Greasy mountain. From that place Coyote ran to live in the sea in the south.

Now the tribes of men began to learn how they should provide for themselves, how they might gather food, hunt, and till the soil. Mavit, Puma, and Rsu-u-û, Wolf, joined their fortunes and went hunting together. One day Wolf said, "I wonder where is our brother, Coyote; suppose I call him." So he took the kidney of a deer and roasted it and the wind carried the appetizing odor toward the south. When Coyote smelled it he said, "Surely, these are my brothers, who wish me to return." So he ran to the place where Puma and Wolf were living. When he reached them he was in great distress, for when he ate food it fell from him as wheat falls from the broken sack. Finally, Puma and Wolf stitched his skin until it retained the food he ate. Then they all went in search of wives. Coyote found a woman and called to the others, who came to see her. She became the wife of Puma, but Coyote said he would take her home. On the way he fell and pretended to be in great pain. The woman was frightened and knew not what to do. Coyote said, "I shall not get well unless you strip off my clothing and your own and carry me on your back for a few yards. That is the way my brothers treated me when I was in this condition before." So she obeyed and made their clothing into a bundle, which she carried on her head, as is the Pima custom. Coyotem humeris sustulit, sed cum paucos modo passus ingressa esset, "Siste! Siste!" exclamavit Coyote, "Doleo; paulum me dimitte." Ubi quod poposcit fecerat, copulare potuit. Mulierem turpiter dum domum iebant Coyote egit. This was the cause of much trouble, for she belonged to a tribe that had great magic power. They tried to induce her to return, but she would not. Furthermore, Puma refused to restore her to her friends. Then the Rsarsûkatc Â-âtam,[a] magicians, revenged themselves by driving the deer, the antelope, and every animal that is swift of foot and soft of fur and useful to human kind into a cave in the Aloam or Yellow mountain, which lies south of the present Pimería and northeast of Baboquivari. This deprived the tribes of men of their chief support, and messengers were sent to see if some means could not be found by which the imprisoned animals could be liberated. One by one these agents failed to

[a] The mirage that distorts the early morning landscape in Pimería is called rsarsûkatc, and it is believed that it is the spirits of the ancient magicians returned to earth.

accomplish the task assigned to them. Year after year they returned without success. At last Coyote was sent to liberate the inhabitants of the cave, who exclaimed as they saw him coming, "Now, we have a visitor who will do us harm." They thought to appease his appetite by offering a piece of meat in the hope that he would eat it and go away. When Coyote had roasted the meat in the fire and looked about him, he saw the gate of the cave and this is what happened: "Where shall I put this meat? It is hot. Where shall I put it? It is hot," he said, and then ran straight to the door of the cave. Before the occupants could recover from their alarm he threw open the door and out swarmed the deer and other game animals as pour forth the bees from a newly opened hive.

Coyote ran for his life and the people pursued him, but he escaped and went to live in the water in the west.

When A-anhitŭpakĭ Si'van^{y}, Feather-breathing Si'van^{y}, was a boy he was mischievous and troubled his grandmother. He went to the cave of the Winds and saw the bow. He made one like it and showed it to his fellows, but they handled it and so took away its power. He made several bows, but the people ruined them by looking at them or handling them. At last they ceased troubling him and he was able to kill rabbits and give them away.

Seeing that he was a good shot, the people told him to take his stand at the two hills and close the gap. He went as directed, but instead of shooting the deer as they were driven past he paid no attention to them, but occupied himself in building a fence of brush from one hill to the other.

Again they told him to perch in a tree above a game trail and watch for anything that might pass under him. He did so and saw the game running, but did not shoot.

A third time they drove the animals toward him and instructed him to shoot the pregnant ones, as they would be fat. He took his place and shot a pregnant woman instead of a doe.

The fourth time they told him to shoot an old one (meaning a deer with large antlers), and he killed an old man.

Then he showed that he had magic power, for he was able to go out and bring in deer without taking days of time like other hunters. He built a house (Va'-aki, now one of the ruins of Salt river), married, and settled down. Väntre was a thief, gambler, liar, and profligate who came to the house of A-anhitŭpakĭ Si'van^{y}, who, knowing his character, did not wish to see him. Väntre brought four reeds filled with tobacco, lighted one, and smoked it. A-anhitŭpakĭ Si'van^{y} would not speak to him and Väntre finally went away. This happened three nights, but not a word was spoken until the fourth night, when A-anhitŭpakĭ told Väntre he would be his friend if Väntre would stop lying, stealing, and the like. He would make the sticks called

ki^{n}tcs, and with them Väntre might win if he wished to gamble. He placed such magic power in the markings on the sticks that no one could win from Väntre. Elder Brother recognized the power in the sticks and told the people that they were powerless to win from Väntre. Elder Brother told the man at whose house Väntre gambled that if he would let his son and daughter work for him (Elder Brother), he would arrange it so that Väntre could not win from others. The man agreed. Elder Brother sent the son to a roosting place of large birds to get feathers. The boy brought the feathers to the house. The girl was told to singe the feathers, grind them into a powder, and mix them with some pinole.

The next day Väntre came to the same place to gamble. Elder Brother said to the young woman, "Go to the pool with your kiâhâ and ollas. Take the pinole and make it ready when Väntre goes there." She followed Elder Brother's directions and went to get the water. Väntre said to the man with whom he had been playing on previous days, "I am going to the pool to get a drink of water before we begin playing." The others told him to go into the house to get the drink, but he went off, saying that he wished to see the young woman. When he came to her he said he wanted her for his wife, but she replied that she would not make any promises unless he drank her pinole. So Väntre was glad to take the drink. The first swallow seemed sour or bitter, but he took a second, a third, and a fourth drink. The moment he took the fourth drink feathers began to appear upon his body; these grew out at once and he became a large eagle. The young woman took her basket, returned to the village, and told what had happened. The people then took their bows and arrows, went to the pool, and there found the eagle sitting on the bank. They surrounded him, but he flew away and found refuge in the mountains, whence he came from time to time to carry away men and women to his hiding place. As their numbers decreased the people cried out for help to Elder Brother, who said he would kill the eagle after four days. He told the people to watch a sharp-pointed mountain after his departure and if a cloud appeared at the left of the peak they would know that he had been killed; if the cloud appeared at the right they would know that he had done some great thing. Eagle was so large and strong that when he sat on the mountain top it broke beneath his weight. It used to be all flat and smooth, but it was his sitting on it that made the peaks and rough places. When arrows were shot at him he caught them in his hand. (This must be a true story, for there is a picture of him with the arrows in his hand, on the dollar. So the Americans must have known about him.)

When Eagle was away Earth Doctor climbed the cliffs to his house, singing as he ascended:

Up the cliff, steep and smooth,
  Up the cliff, steep and smooth,
Up the cliff, steep and smooth,
  Climbs Elder Brother.
With his shining power,
  Up the cliff, steep and smooth,
Up the cliff, steep and smooth,
  He climbs, step by step.

He then carried on the following conversation with Eagle's wife:

"Can this baby talk?"

"No; he doesn't say very much and doesn't seem to know anything; he's too small."

"Does Eagle ever sleep in the daytime?"

"No, not very often; but sometimes, if I sit down with him and scratch his head, he will go to sleep."

"Do that next time I come."

At that moment Eagle was again heard approaching with a roar that shook the mountain like a tree in the wind. He brought four living men, whom he threw from a distance upon the rock, where they lay groaning for a time before breathing their last. Eagle asked his wife if anybody had been there and she said no one was about. He declared that he smelled some one, but finally concluded that he had been mistaken. After he had eaten he lay down, and as she sang the following song and rubbed his head he quickly went to sleep:

Haya yakahai yahai mo! Haya yakahai mo!
  I am sleepy, I am sleepy.
Haya yakahai yahai mo! I am sleepy.

When Eagle returned, the baby tried to tell him what had happened, and his father inquired, "What made him say that? He never talked that way before; besides, I smell somebody. Some one must have been here."

"No, nobody; we have been here alone."

Then in the form of a fly Earth Doctor concealed himself among the dead bodies that were corded up like wood and sang:

Himovali! Die fly! Himovali! Die fly!
  I shall sleep! I shall sleep!
Himovali! Let die! I am drowsy.
  I will sleep! Buzz-z!

When he had gone to sleep she began to whistle. He awoke and said:

"What made you whistle like that?"

"Oh, nothing; I was just playing with the baby; that's all."

So he went to sleep again and again she whistled; he awoke again and asked:

"Why did you whistle?"

"Oh, I was just playing with the baby."

So the third time he went sound asleep, and she whistled softly, but he did not awake. Then she whistled louder and Elder Brother came out and resumed his natural form. He beat the head of Eagle until it was flat. He cut Eagle's throat and that of his son, sprinkled their blood upon the dead bodies, whereon they all regained their lives. He asked them where they belonged, and on finding where each lived he sent him home. When he came to the last bodies he found that they spoke a different tongue, so he sent them to a distant land, where they practised their peculiar customs. The Pimas suppose that these were the whites, who became white from lying under the others until decayed.[a]

Elder Brother then went home and told the people how to conduct themselves when they had killed an enemy, such, for example, as the Apaches. On his return he found the people singing and dancing. He arranged four periods, and each period contained four days. So to this day the man who kills an Apache must live sixteen days in the woods and subsist upon pinole.

While these events were occurring here the people about Baboquivari wished to have Elder Brother come to them.

At the time when Elder Brother transformed Văntre into an eagle strange things happened to the people of Casa Grande. There is a game called tâkal played by the women. One day the women were playing tâkal, and among them was the daughter of Si'al Tcu'-utak Si'van[y]. Suddenly a strange little green lizard dropped in front of her while she was standing among the other women. The earth about the spot became like the green part of the rainbow. They dug there and found some green stones (stcu'-uttŭk hâ'tai'), which became very useful for necklaces and ear pendants.

There were people living at some tanks on the east side of the mountains (Ta'-atûkam) north of Picacho, and among them was a man named Tarsnamkam, Meet the Sun. He saw the beautiful stones used at Casa Grande and wished to get some of them; but how was

[a] "Mr J. D. Walker, an old resident of the vicinity of Casa Grande, who has been to me personally an excellent friend and valuable informant, told me this tale:

"'The Gila Pimas claim to have been created on the banks of the river. After residing there for some time a great flood came that destroyed the tribe, with the exception of one man, called Ci-ho. He was of small stature and became the ancestor of the present Pimas. The tribe, beginning to grow in numbers, built the villages now in ruins and also spread to the north bank of the river. But there appeared a monstrous eagle, which, occasionally assuming the shape of an old woman, visited the pueblos and stole women and children, carrying them to his abode in an inaccessible cliff. On one occasion the eagle seized a girl with the intention of making of her his wife. Ci-ho thereupon went to the cliff, but found it impossible to climb. The girl, who was still alive, shouted down to him the way of making the ascent. When the eagle came back Ci-ho slew him with a sword, and thus liberated his people from the scourge.'" A. F. Bandelier, Papers Archeol. Inst., ser. IV, pt. II, 462–463.

he to do it? He made a fine green bird, stcu-utûk o′-ofĭk, parrot, and sent it to Casa Grande, telling it to swallow all the green stones it could find about the houses. The parrot went to Casa Grande and was found one day by the daughter of Si′al Tcu′-utak Si′van^{y}. The bird was kept several days, but it would not eat, so it was turned loose. It went about until it found a piece of turquoise, which it swallowed. The daughter of Si′al Tcu′-utak Si′van^{y} saw this and told her father, who directed her to give the bird all the turquoises she could find in the house. The people gathered to see the bird that ate stones, but as soon as it had eaten until it was full to the mouth it flew away. Tarsnamkam was glad to see it come safely home. The parrot vomited the stones, which its owner gave to the people to use, and there were plenty for all. Si′al Tcu′-utak Si′van^{y} was angry when he learned that the bird had been sent to steal all his turquoises. He sent the rain for four periods, or sixteen days, to destroy Tarsnamkam, but the latter also possessed magic power and was not injured. At the end of the sixteen days Tarsnamkam sent a man with a fine football (rso′nyikĭvol), directing him to give it to Si′al Tcu′-utak Si′van^{y}'s daughter, whose name was Pia Kŏnĭkam Of′(i). The messenger went near the woman's house as she was at work and kicked the ball so that it rolled close to her. She took it up and hid it under her dress and told the man there had been no ball there when he came up to inquire about it. He declared that it stopped close by her, but she again said no, she had seen no football. The man went off, but the young woman called to him to come and get his football. When he came back she searched for the ball, but it was not to be found. It had gone into her womb and become a child. When this child was born it was a strange-looking creature. The people wanted to destroy it, but the mother said it was her child and she wished to care for it.

The people wished to destroy the child, because it had long claws instead of fingers and toes; its teeth were long and sharp, like those of a dog. They gave it the name of Hâ-âk, meaning something dreadful or ferocious. This female child grew to maturity in three or four years' time. She ate anything she could get her hands on, either raw or cooked food. The people tried to kill her, because she killed and ate their children. She went to the mountain Ta′-atûkam and lived there for a while in a cave. Then she went to Baboquivari for a time and then to Poso Verde, where she was killed by Elder Brother. As Elder Brother and the people were preparing to overcome the magic power of Hâ-âk they sang together:

Dazzling power has Elder Brother,
  Mastering the winds with song.
Swiftly now we come together,
  Singing to gain control.

Kovakova, kovakova,
  Kovakova, kovakova.
Singing on the summit
  Of great Mo'hatûk mountain,
Anayokuna, anayokuna, hayokuna.
Sacred pipe of Tcu-unarsat,
  Sleep-inducing sacred pipe,
Anayokuna, anayokuna, hayokuna.
  Hâ-âk flees from her pursuers,
But her spring and mortar stay.
  Throw a great stone!
Throw a great stone![a]
  The blue owl is brightest,
Throw a great stone!
  The blue owl is brightest,
Throw a great stone.

When he killed Hâ-âk a great feast was made, just as when Eagle was killed, and to this day the cave remains there where Hâ-âk was killed, and 2 or 3 miles distant is a stone inclosure, Hâ-âk moakkût, Place where Hâ-âk was killed. The people formerly placed offerings within the inclosure to bring them good luck.

Another version of the same story states that Vaktcuktcïthâp, the mosquito hawk, wished to marry the virgin at Casa Blanca, who had many suitors. He went to the Sun, who gave him a many-colored ball, which he took to the woman Pia Kŏnïkam Of'(i). When near her he kicked it as the Pimas do the kicking ball, so that it rolled near her. She placed it in the fold of her blanket and became pregnant.

After Hâ-âk was killed the people were invited to come and partake of the feast which had been cooked there. One old woman and her two grandsons were not invited to come. When the feast was over she told her grandsons to go and see if they could find any of Hâ-âk's blood, and if so to bring it to her. After the boys had brought the few drops of blood which they found among the rocks she put it into a dish and told them to look at it after four days. When they did so they found two eggs in the dish. On reporting this to their grandmother she told them to look again after four more days. When they looked they saw two little birds, at which their grandmother told them to look again at the end of four days. When they came to look they found two very beautiful birds. After four days the people came and tried to destroy the grandmother and the boys in order to get the birds. The old woman told her grandsons that after another four days the people would come and take their birds away. So they must take them at night to a distant land and set them free there. She said that when they returned they would find her dead, as the people would have killed her.

[a] The stone referred to is the one thrown against the cave walls by Hâ-âk when she was entrapped. In proof of the story we may see the stone there to the present day.

After the people had killed Hâ-âk they followed the tracks of the boys, who had gone toward the east with their parrots. The pursuers raised a cloud of dust as they went along, which betrayed their presence on the trail to the boys, who exclaimed, "What shall we do!" At length they set free the parrots, which flew up into the mountains, where they concealed themselves in the forest. Following their example, the boys hastened to the same place, where they successfully eluded the pursuers. After the people had abandoned the search the boys went back to their former home and found that their grandmother had been killed. She had left directions which they carried out. They gave the body proper burial in the sand. At the end of four-day periods she had told them to visit her grave until they saw a plant growing out of it; four days after it appeared they were to gather the leaves, and in time they would learn what was to be done with them. The boys obeyed her commands and obtained tobacco, which they learned to use through the instruction of Elder Brother.

After killing Hâ-âk Elder Brother made his home at Baboquivari for some time. Hearing of the fact that the boys were living alone at their old home, he visited them. He inquired about their welfare and seemed to be disposed to befriend them. Finding the tobacco leaves, he inquired if they had been used yet, and was assured that they had not been. Elder Brother then revealed the purpose for which the leaves had been intended. "These are to be rolled in corn husks and smoked," said he; "I will give you, also, earth flowers[a] to mix with the tobacco when you smoke if you desire to gain the favor of the women." He showed them how to collect the bark of the tree which induces sleep.[b] "Make this into a powder," said he, "and when you wish to overpower anyone just shake this before them." Then Elder Brother left the youths, who followed his instructions and found the love philter and the sleeping powder to be irresistible. But the people were incensed at their use of the charms and finally killed them.

Elder Brother continued to live in the cave at Baboquivari for some time. He went about the country from village to village seeking to do mischief. He sang the song of the menstrual period and accompanied it by reviling the family of the young girls. At last the people could endure his pranks no longer and drove him away. He went to Mo'hatûk mountain, north of the Gila, and the people there gathered to destroy him.

Elder Brother went into his house and the people came and clubbed him to death. They pounded his head until it was flat, then dragged

[a] *Tcuwut hiâsik*, a whitish lichen gathered by the Pimas and kept in little bags or in hollow reeds 3 or 4 inches long.

[b] *Kâ'siłakût* ("to make sleep"), said by the Papagos to stand on a mountain about 40 miles southwest of Poso Verde. So powerful is it supposed to be that those who go to gather the bark are overcome with sleep if they do not hasten when cutting it.

him into the woods and left him there. The news was spread about the country that he was dead, but the next day he reappeared among the people. They were afraid, but gathered together and killed him again. After carrying him to the woods they cut his flesh and scattered the pieces, pounded his bones into powder and cast it to the winds, but the next day at the same hour he was about among them again. Again they killed him, and this time his body was burned to ashes. Yet he was among them the next day as before. Then a great council was called and they discussed plans for getting rid of Elder Brother. Some declared that if they did not kill him the fourth time they would never kill him. So they called on Vulture, who had been saved with Elder Brother at the time of the flood, thinking that he must have magic power or he would not have survived the flood.

Vulture was a man who transformed himself into a bird with his own magic power and had gone through the openings in the sky and thus saved himself from destruction during the flood. After he came down from the sky he wandered about the country and finally built a va'-akĭ, magic house, the ruins of which yet remain, south of where Phoenix now stands, between the Gila and Salt rivers.

Vulture was living in this va'-akĭ when the people came to him with their complaints concerning Elder Brother. They asked if he could do anything to help them. Vulture said he had never used his magic power, but he would test it. He asked the people to come to his va'-akĭ and he would make the trial in their presence.

After the people had gathered in the house and the doors had been closed he brought on darkness with his magic power while it was yet daytime. The darkness was so heavy that the people could see nothing. A beam of light arose which grew stronger and stronger until during the second night of their sojourn in the house it became as brilliant as sunlight. There were four colors, four threads of light, that extended upward until they reached the sun. Vulture then ascended each thread in turn, telling the people that he must have magic power or he could not have done so. He told the people that in four days Elder Brother would fall dead. On the fourth night he reached the sun and remained there. All the people who were in the va'-akĭ saw these miracles performed.

Vulture told the sun to spit on the house of Elder Brother,[a] on the four pools of water at the va'-akĭ where Elder Brother kept his magic power, on his dwelling places so that heat might fall upon him and smother him. The sun did as he requested. Toward the end of the four days Elder Brother acted like a lunatic. The heat became so intense that the cool fountains became boiling water and he was finally suffocated.

[a] Said by Thin Leather to be in the Estrella mountains. Antonio thinks it is in Baboquivari mountain.

After his death his skeleton was exposed for a long time, until one day some boys were playing near where it lay. They heard a strange noise like thunder that shook the earth, though there were no clouds in the sky. The boys saw that Elder Brother was regaining life and power. He sat up and rocked back and forth like a drunken person. The boys ran and told their story to the people, who were perplexed and alarmed. They gathered together, bringing all their weapons, and finally surrounded Elder Brother, who was by this time in full possession of his power. As the people came about him with their bows and arrows in hand he began to sink down into the earth, and in spite of their outcry he disappeared before their eyes.

Elder Brother sank through the earth and found the people that Earth Doctor had assisted to reach that side in order to escape the flood. Elder Brother told the people there of his ill treatment and asked them to come through and fight with him and to take the land away from the Indians. After four months' preparation they set out upon their journey, first singing the following song:

We go; we go; we go; we go.
  Happy, we leave our homes.
We go; happily we go.
We run; we run; we run; we run.
  Happy, we leave our land.
With pleasure hence we hasten.

Elder Brother told Gopher (Tcu'ohŏ) to bore a hole for the people to come through. Gopher made a hole through the earth like a winding stair.

Coyote learned that these people were coming out in our country and he went about looking for the place of their emergence. He finally discovered them coming through like ants from their hills. Elder Brother told Coyote not to go near them until all had come forth. Coyote did not heed the caution, but went and looked down the hole and laughed, which caused the opening to close. Five gentes[a] had come out, and it is supposed that those that were shut in belonged to yet other gentes. Upon their emergence Elder Brother and his followers danced and sang as follows:

Together we emerge with our rattles;
Together we emerge with our rattles,
  Bright-hued feathers in our headdresses.

With our nyñnyĭrsa we went down;
With our nyñnyĭrsa we went down,
  Wearing Yoku feathers in our headdresses.

This is the White Land, we arrive singing,
  Headdresses waving in the breeze.
We have come! We have come!
  The land trembles with our dancing and singing.

[a] See p. 197.

On these Black mountains all are singing,
Headdresses waving, headdresses waving.
We all rejoice! We all rejoice!
Singing, dancing, the mountains trembling.

About half of these people came out and followed Elder Brother's leadership until they had killed all his enemies and captured young and old that did not resist.

Elder Brother's greatest enemies were the people living in the large pueblos, the ruins of which yet remain scattered about the Gila and Salt river valleys. He and his supporters approached one of the easternmost of these pueblos on the Gila, which is now known as Casa Grande, singing:

Yonder stands the doomed habitation.
About the pueblo runs its frightened chieftain
In yellow garment with hand-print decoration.

They attacked and defeated the forces of Morning-Blue Si'van^{y}, and then moved about 18 miles northwestward to Santan, where they sang:

In their house of adobe they are staying;
Their chief with magic power fears me.
In their house of adobe we see their chief.

The chief of this extensive pueblo was Kia-atak Si'van^{y}. His forces were defeated and his pueblo overrun by Elder Brother's warriors, who next moved to the villages about 4 miles west of Santan, where they sang:

Some will truly see;
Some will truly see;
Will see their house
Behind the okatilla stockade.

The chief of this place was called Tcuf Baowo Si'van^{y}, and after he had been overcome the conquerors moved across the Gila toward the pueblo of Sweetwater, singing as they approached:

There is the land of many beads.
There is the land of many beads.
Some one comes forth.
He knows what will befall him.

The leader, Ta'-a Si'van^{y}, was easily defeated, whereon the victors moved upon the pueblo of Casa Blanca, singing:

It will be difficult,
It will be difficult,
To capture this pueblo
With its magic power.

They then attacked Tco'tcûk Tâ'tai Si'van^{y}, who was the most powerful of all the chiefs who ventured to oppose them.

He knew that they would defeat him, yet he struggled bravely to save his people and at the last to save himself. He first took some soot from his chimney, powdered it in the palm of his hand, blew it into the air, and darkness immediately fell so dense that Elder Brother's warriors could see nothing. Tco'tcûk Tâ'tai Si'van^{y} then threw down his dwelling and made his way through the midst of his enemies. But the god of darkness dispelled the night and the escaping leader was seen in the distance. Elder Brother's warriors succeeded in getting ahead of him and were about to surround and kill him when he wiped the tears from his eyes and blew the drops among the men about him. This produced a mirage which concealed him from view. But the god of the mirage caused the veil to lift and again he was seen fleeing in the distance. Again Tco'tcûk Tâ'tai Si'van^{y} was headed and in danger; but this time he took out his reed cigarette and blew puffs of smoke, which settled down upon his pursuers like a heavy fog through which he continued his flight. The god of the fog drove it into the sky and he was seen escaping. He now realized that he had but one more chance for his life. When the fog had formed clouds in the sky he took his belt and threw it upward and climbed up and laid himself against the clouds as a rainbow. It was impossible for the god of the rainbow unaided to bring him down; he made several unsuccessful attempts before he hit upon the expedient of making some spiders which he sent after the rainbow. They formed a web over the bow and brought it to the earth and destruction.

Elder Brother's warriors were so astonished at the prowess of Tco'tcûk Tâ'tai Si'van^{y} that they thought he must have a strange heart, so they cut it open to see and, sure enough, they found within it a round green stone about the size of a bullet. The stone is kept to this day in a medicine basket which they captured with his grandson. Before he had undertaken his flight he had told the boy, Kâ'kânyĭp, to go with his basket and hide under a bush; after the grandfather should be killed the lad should come, touch him, and swallow the odor of the body and he would acquire the power of the Si'van^{y}. But a warrior named S'hohany discovered the little Kâ'kânyĭp and after a time sold him to the Papago chief, Kâk Si'sivĕlĭkĭ, Two-Whirlwinds. The box is yet kept by the Papagos living 30 miles south of Gila Bend. If it is disturbed a severe storm is produced and cold weather prevails in Pima Land.

After capturing the pueblo at Sweetwater and destroying its chief the invaders moved against Vulture's pueblo, 6 miles west of where they fought the last battle.

They then sang:

Child of the Raven! Child of the Raven!
You of the dazzling power.
See my magic power shining like the mirage.

Elder Brother told his army to capture Vulture alive. "How can we identify him? We do not know him," said they. Elder Brother told them to capture the warrior with white leggings; they were the distinguishing mark of Vulture. They obeyed and brought the defeated leader to Elder Brother, who scalped him; this accounts for the naked head of the vulture of to-day.

Moving on to Gila Crossing, Elder Brother and his party sang:

I am the magician who with the sacred pipe
Of Tcu-unarsat increase my magic power.
I am the magician of the downy feathers.
With the soothing sacred pipe
I bring sleep upon my enemy.

In the battle which ensued Tcu-unarsat Si'van^{y} was defeated, whereon the victors proceeded to Mesa; and before the pueblo of A'-an Hi'tûpakĭ Si'van^{y} they sang:

The small Blue Eagle alights;
The small Blue Eagle alights.
After emerging from the middle of the land.
To and fro he moves before me
As my staff already has foretold.

After capturing this pueblo the conquerors moved against the Vi'-iki-ial Ma'kai Si'van^{y} near Tempe, singing:

Look for him! Look for him!
Poor distracted enemy; take him!
Poor fear-stricken enemy; take him!

They then proceeded westward against other pueblos, which they destroyed, and afterwards returned to take possession of the Gila valley.

While the war raged along the Gila some of the inhabitants of the Salt River pueblos sought safety in flight toward the Colorado. They descended that stream to the Gulf of California, the east coast of which they followed for some distance, then turned eastward and finally northeastward, where they settled, and their descendants are the Rio Grande pueblo tribes of to-day.

Kâ'kânyĭp married Kold Ha-akam, the daughter of Kâk Si'sivĕlĭkĭ, and lived with his father-in-law in the Salt River valley near where Phoenix now stands. There his wife became pregnant and would eat nothing but green plants and game found in the mountains. So one day Kâ'kânyĭp went to the mountains to search for provisions for his wife. He killed a deer which it took him some time to dress. In the meantime the Apaches surrounded him. He fought bravely, but they succeeded in killing him. His father-in-law awaited his coming during the evening and through the night; then he called the people together and told them that his son-in-law had disappeared. All searched until his body was found. This they burned to ashes before

returning to their homes. After this event the people moved southward as far as Santa Rosa. There Kâ'kânyĭp's son was born. He was named Pat' A'-anukam, and under his mother's care became a brave and noted man. While yet a boy he one day accompanied the people on a hunting expedition. Some of the hunters asked him many questions to learn if his mother thought about marrying them. He told his mother about these inquiries, which caused her to weep bitterly. She told him how his father had been killed. After hearing this sad story he went into the council house and told the people that he wished to see the springs and other places where the Apaches obtained drinking water, and also to see the trails they used. His further adventures are related in the texts, page 353.

COYOTE

At the time of the destruction of the earth, Coyote was saved in the manner already described, and he again appeared at the emergence of the underworld Pimas that Elder Brother brought up to fight his own battles. Then it was that Coyote looked down the opening to see the humans struggling upward like a long line of ants ascending a tree, and the sight provoked him to laughter, an act that caused the earth to close up and prevent many people from reaching Pima Land. After that Coyote disappeared again. Now we are to hear the story of his subsequent life.

Coyote wandered about alone somewhere in the West after we last heard of him, until one day he made two other coyotes from his image, which he saw reflected from the water; one he called the elder brother or Sandy Coyote, and the other younger brother or Yellow Coyote. He told each to fetch a log. When they brought the logs he told them to embark upon the sea and seek for land beyond it. They followed his directions and sailed for days and nights across the water, the younger always behind the other. One day the elder said:

"Younger brother, why are you always behind? Why don't you come faster?"

"My log will not go any faster, that is why I am not with you," replied Yellow Coyote.

"How are you traveling, with your eyes wide open or with them closed?"

"My eyes are closed," answered Yellow Coyote.

"Oh, that is why you are so slow. Look up and open your eyes and your log will travel fast."

Yellow Coyote opened his eyes, but when he looked upon the water the wind blew the foam into his face and blinded him. "I am blind," he cried.

Sandy Coyote stopped and tried to restore his sight, but without success, finally concluding that they had better return to their father

Coyote for assistance. After they had returned to land and Coyote had restored the sight of Yellow Coyote the two brothers went to dwell in the land lying between the Pima country and the Mohave territory, near the mouth of the Grand Canyon. There they built a house with the doorway toward the east, as is the Pima custom. When it was finished Sandy Coyote said, "Go in and take your choice of sides. You need only half the house, and I will take the other half."

Yellow Coyote said, "You take your choice and I will take what is left."

And so they continued telling each other to go in and take the first choice until the house grew old and fell down. They built a second house, and again their dispute lasted until it fell. The same result was reached with the third house, but when the fourth was built the elder brother went in and chose the south side of the house, leaving the north side for the younger.

When they went to gather the screw bean the elder brother took the beans on the south side of the trees and the younger brother took those on the north side. One day the elder said to the younger, "How do the beans taste on that side of the tree."

"They are very good," replied the younger, but when they returned home in the evening he was taken sick.

"It is caused by the beans you ate," said Sandy Coyote. "The beans on the north side are not ripened by the sun as are those on the south side. To-morrow you shall see the difference." And so the next day they went again and found the screw beans sweeter on the south side of the trees.

Every evening they sat and split sticks with which to build bins, log cabin fashion, for the screw beans that they gathered. One day the elder brother said, "Let us play some kind of a game and bet our screw beans, and then we will not sleep too soon." So they made some ki^{n}tskût.[a] The younger lost all his screw beans that night and the next day the elder said, "We will not go for beans to-day." So that day the younger went hungry, and for many days thereafter, for the game of ki^{n}ts continued until the beans were rotten and not fit to eat. Then they wagered their arrows and other property. Sandy Coyote won the arrows, bow, sinew, and feathers belonging to Yellow Coyote and then went out and brought in all the large and fierce animals, but Yellow Coyote without a weapon could get nothing but the small creatures which were of little use to him.

In these straits Yellow Coyote sought the aid of Finish, who lived in the West. "I need your help, for I am losing a great deal," said he. Finish accompanied Yellow Coyote to the latter's home. When they reached the house Yellow Coyote went in first, but when the stranger tried to enter he was caught by sticks and held fast in the doorway.

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[a] See p. 175.

He saw that the house was divided into two parts before him; even the fireplace was divided, and no one said a word to indicate which side he should enter. For a long time he was silent. Then he said: "What kind of people are you that you do not speak to me? It is the custom to ask a stranger 'Where are you from?' or, if they come at night, 'Where were you when the sun went down?' Why are you not thus courteous? Am I a thief, a murderer, or a ghost that makes you speechless with fright?"

After the stranger had spoken, Mountain Lion got up, took his tobacco, rolled and lighted a cigarette.

"Ha, you are here also," said the stranger, "and have said nothing to me." But Mountain Lion put away his tobacco without offering any to the other, who exclaimed: "Do you think I have no tobacco? Don't you see that I am caught here in the door because I have so much tobacco in my bundle that it will not go through?" Then Yellow Coyote invited him to come to the south side of the house.

For many nights they played different games, but Yellow Coyote continued to lose at all of them. At last he told Finish that he had hit upon a game that he believed they could win with. So he called Tco'kokoi, or Black Beetle, and told him that they wanted him to run a football race with Vap'kai-ĭki, Duck. When Black Beetle heard that the south division of the house wanted him to run a race he said, "While you people were planning for this I had a dream. I dreamed that I had in my right hand a green ball, which I threw or kicked with my right foot toward the east. After I had kicked four times I reached the place where the sun comes up. When I turned around the darkness came behind me, but I kicked the ball four times and reached the place where the sun goes down, and the darkness did not catch me."

All his party were glad to hear of Black Beetle's dream, saying that it was a sign of good luck. So the next day Yellow Coyote said to his brother, "We will draw a line here for the starting place. If your man kicks his ball back over this line first he will be the winner and if my man kicks his ball first over the line I shall be the winner." They agreed that whoever won should have the privilege of marrying at the end of four days.

Duck and Black Beetle started off and ran for miles, and after a long time the latter came in, kicking his ball first over the line, thus winning the race for Yellow Coyote. At the end of the four days Sandy Coyote acted in bad faith, for he went away in the evening and toward midnight returned with a wife whom he had taken among the Va-aki Â-âp, who lived northwest of the Coyote home. Her name was Itany Of'ĭ.[a] Yellow Coyote said, "I am going to build a fire and see what kind of looking woman my elder brother's wife is."

[a] Itany is the name given a saltbush, Atriplex sp., the seed of which is eaten by the Pimas.

But the fire would not burn, and he got angry, exclaiming, "What shall I do? Here is that dirty syphilitic woman. I know her. I have passed her house many times, and I never thought she was to be my brother's wife. When she came in I smelled her breath, and the odor filled the house. What a lunatic my brother is to bring such a woman into the house." Then he covered the embers of the smoldering fire and laid down to sleep.

After four days Yellow Coyote went away in the evening toward the southeast and came home with a wife at midnight. She belonged to the people living on the Gila river supposed to be the ancestors of the Pimas, and her name was Ho-ony Of'ĭ,[a] Corn Woman. When they entered the house Sandy Coyote said, "I am going to build a fire and see what kind of looking woman my younger brother's wife is." But the fire would not burn, and he became angry, exclaiming, "What shall I do? Here is that dirty syphilitic woman. I know her. I have passed her house many times, and I never thought she was to be my brother's wife. When she came in I smelled her breath, and the odor filled the house. What a lunatic my brother is to bring such a woman into the house." Then he covered the embers of the fire and lay down to sleep.

After a time they began to play ki^{n}ts again, and Yellow Coyote lost as before. After he had lost all his property he wagered his body and soul, which Sandy Coyote won. Then the latter killed him and ate his flesh. Yellow Coyote's wife was pregnant at that time and later gave birth to a boy. When this boy was about nine years old he went out one day and met Sandy Coyote, who was bringing in a deer on his shoulders. A piece of the deer fat fell, and the boy picked it up, concealing it in his armpit. Sandy Coyote asked him if he had seen anything of the fat, but the boy said he had not. Sandy Coyote searched him and found the fat, which vexed him so that he thought to treat the lad as he had his father. "Let us play ki^{n}ts together," said he. The boy told his mother about it, and she cautioned him not to gamble, as that was the cause of his father's death. For fear that he might do so she took him that night away toward the east. It was raining, but she carried fire with her in a small olla. She took up her residence in the Superstition mountains, where they lived upon herbs and grass seed. One day while the mother was away gathering seed the boy killed a bird with his little bow and arrows. When she returned he declared that he had killed a bird, but she would not believe that he had done it. But they buried the bird in the ashes and ate it. After that the boy killed many birds, rats, cottontails, and large hares. From time to time his mother made larger arrows and a heavier bow for him. One day he came running to his mother asking for a yet larger bow that he might kill a mule deer. She told

[a] There is a conflict of opinion as to which of these two women was married by Sandy Coyote.

him that only a grown man and not even he single handed could kill a mule deer. But he insisted, saying that he could kill it. So she made the large bow, and he went away with it. When he reached the place where the deer was and was creeping close upon it a soft whistle reached his ear. He looked around and saw Mountain Lion coming toward him. When Mountain Lion came up he said, "Wait here and I will kill the deer for you." He was as good as his word and brought the deer and also gave the boy his bow, arrows, quiver, and clothing, at the same time telling him not to let his mother know who had killed the deer, but to tell her that a man had given him the other things. The mother went with the boy and tried to find a track, but she could find nothing. After that the boy killed plenty of deer. One day he shot a deer which escaped with an arrow in him.

One day as Vulture was returning to his home near Maricopa he saw a dead deer with a strange arrow in it. He took both deer's meat and arrow home with him and showed it to the people who gathered according to their custom about him. He asked whose arrow it was, but no one could tell him. Sandy Coyote was in the company and recognized the arrow, but was too much ashamed to speak. Then Vulture said, "I think I know the arrow. I have heard of a boy living in the west who was ill treated, so that he and his mother were driven away to the mountains. I think they must have found a home somewhere in this country, for this is his arrow."

Sandy Coyote admitted that it was his son's [nephew's] arrow. "Give it to me, and I will some day go there and give it to him," he said. The next day Sandy Coyote searched for and found his brother's widow and her son. When he reached their house he went in and saw them eating a dish of meat. "Here, take your arrow," said he. "You shot a deer, which carried it away and your father's brother found it, brought it to his home, and inquired whose it was. At last they said it was yours, so I bring it to you." The boy said nothing, but took the arrow and put it away. After the boy and his mother were through eating they put away the remaining food without a word.

Sandy Coyote turned to leave, making an attempt to whistle to show his indifference to the coldness manifested toward him, but he only succeeded in shedding tears. "What is the matter with you that you cry so?" said the boy; "when I was younger and lived with you, you never gave me meat, but I did not cry."

A long time after that the woman said to her son, "I am going home to my own people, where I may get something to bring to you, and then you may go and play ki^{n}ts with Sandy Coyote, who killed your father; I think you are clever enough to beat him now." For many days he waited for his mother to return, and at last he went

after her. On the way he saw two attractive girls approaching him. Turning aside, he lay down beside the trail and began to sing a pleasing song just after the girls had passed him. Surprised at hearing a voice behind them, they looked back to see whence it came, but could find no one. They saw nothing except a dead body that was well advanced with decay. When they started on they heard the singing again, but when they renewed the search they could find no living person. The younger said, "It must be this decaying corpse that is singing."

"Let us go," said the elder; but the younger refused, saying, "I am going to take that dead body, for I can see it winking." So she took it to her home and left it while she went to gather grass seed. Soon the younger girl wanted to return to the house.

"You want to go back to that putrid corpse," said the elder; "you crazy thing!"

"Well, I am going; and if you are going to stay here, stay as long as you like." So the younger woman got ready to go home, but the other also got ready and accompanied her. When they reached the house the younger went in and found a handsome young man, to whom she went without a word. The elder girl called her several times, asking her to come and help cook some food. At last the elder girl came and discovered the young man, and she also came to him. But the younger said, "You scolded me for bringing him here; now you may go out and leave him to me."

Finally the young man said, "Go out, both of you, and cook something for me to eat; I am hungry." So they both went to do as he wished. The next day the husband of the two young women came home, and was very angry at finding the young man there.

"Put up one of your wives," said he, "and we will have a game."

The young man said, "I have nothing to wager." But the husband replied, "Put up one of your wives." Then the young man said, "You must put up your shirt." And it was the turn of the husband to reply, "I have no shirt."

"Yes, you have."

"No, this is my skin," he answered, scratching his breast until the blood came.

"It is not your skin; it is your shirt. If you do not believe me, I will take it off you and then I shall win the wager from you." "I agree," said the other. So the young man took the husband of the women up by the hands and shook him, and he dropped dead out of his skin.

At this time the young man's mother came, and they took the two young women with them to their home. Soon he went to play ki^{n}ts

with Sandy Coyote, taking with him beads, deerskins, and other things to wager. As he journeyed he sang:

Vasohona, vasohona, âikinynamuginu yângai ku-ulĭ.
Vasohona-a, vasohona.
Over there, over there, you pay me my father old.
Over there, over there.

As he went along he took some white stones, which he made to resemble white birds' eggs. These he put in a little nest which he made. When he reached his uncle's house he told Sandy Coyote that he had come to play kiⁿts with him. They got ready to play and put up their wagers, but the young man said, "It is about time the birds laid their eggs."

"No," said Sandy Coyote, "it will be two or three months from now before they begin to build their nests."

"As I came along I saw that the dove had already laid her eggs."

"No; you are lying to me."

Then the young man said, "Well, if I go and bring those eggs to you and show you that I was telling the truth I shall win our wager, if I do not bring them you shall win." So the young man went out and brought the eggs. After the wager had been paid they prepared for another game and another wager was laid. When they were ready the young man cut his toe nail and threw it into the west, where it hung, looking like the rim of the new moon.

"Look at the moon there in the west," said he.

"No; we are having a full moon now," said Sandy Coyote, "it is in the east; you are lying to me. How could the full moon be in the west in the evening?"

"Well, suppose you look. If you find any moon you shall pay me the wager, and if you do not then I shall pay you." So Sandy Coyote looked and saw the supposed moon and came back and said, "You win."

Again and again they played and again and again the young man won.

When they were ready to play kiⁿts Sandy Coyote said, "Sit there; it is your father's place."

But the young man answered, "No; I shall sit here and you may sit there. If you wish me to sit there you must carry me there. If you can carry me there you will win all we have wagered this game; if you can not, then I shall win."

So Sandy Coyote thought he could do it easily, and took hold of the young man to carry him to the other side, but he found the man so heavy that he could not move him. So Sandy Coyote lost again, and was compelled to admit that he had lost all that he had. The young man said he would like to have Sandy Coyote wager himself, if he had nothing else, and the other agreed to this.

When they were ready to throw the ki^{n}ts the young man said, "Your cane is looking at me very sharply; I would like to have it turned the other way."

Sandy Coyote replied, "No one can move it in any way. I can not, nor can you."

"Well, suppose I pull it out and turn it the other way, then I shall win the wager; and if I can not, then you shall win."

The other agreed; so he got up and moved the cane around as he wished, thus winning the final wager. Then the young man grasped Sandy Coyote by the hair and shook him until he dropped down dead. Taking all that he had won, the young man went home.

After a time his mother said she would like to go to where her people were living. After some preparation they started on their journey. At the end of the first day they camped. During the night the mother turned herself into a gray spider. The second day they went on again and camped in the evening. That night the elder wife turned herself into a black spider. At the end of the next day's journey they camped again, and that night the remaining wife turned herself into a yellow spider. The young man was left alone the next day, but he hoped to reach his mother's people, and so journeyed on until nightfall, when he camped. During the night he turned himself into a rough black lizard.

Even to this day Coyote is known as the wise one. It is dangerous to kill or harm him, for he will avenge himself by stealing or doing worse mischief. He knows well the house of the one who tries to injure him, no matter where the deed may have been performed. And yet he is not always unfriendly, for if he is heard to cry out as if jumping it is a warning that the Apaches are near and danger menaces.

ANOTHER VERSION OF THE CREATION MYTH[a]

before the earth was made nothing but darkness. It has been found only wind blows came rolling from one place to another, nothing but wind. at the time there was a man in the darkness alone. and has told that this man was wandering from point to point.

This has been for quite awhile. and no pleace for to rest on. So the man feel himself and know that he was a man by himself. and more of he found a push called (Shiquia)[b] and after he found this, and he call (Shiquia)

And also he made the earth. and so he call himself a God. now at the

[a] It seems worth while to present here the version of the cosmogonical myth which was written for the author by a young Pima who had learned to write English during the term of several years which he spent at a Government school. It illustrates the confusion existing in the minds of the younger generation; to some extent, also, the order of words in the Pima sentence, as well as the difficulties that must speedily beset the ethnological investigator as soon as the older people shall have gone.

[b] Rsukoi.

time this darkness was still on yet. so the first he made water. when he had done this work, he took the water and throught up in Heaven. which means stars. also he made the moon and mialk-way. to give more light. he also made the sun. which is greater then what he made. now in those day's there. at a ceatan day. He sitted himself to made a first man out of a very hard mud. and there was another man name (Sis Hia.) and (Gia- (via mack)

These two men begain too make all kinds of living creaters. and when these two men made men out of hard mud the pleaced at a house to see what will be, in a day or two.

now when these men pleaced at. they want a little way to see what will be done with they work. so the haerd sone one speacking in that house. but could not understand. next there was another one speacking in our Lounger and Sie Hia) said that he understand that will be great wares to all nathion, not very long after this poeple at Mesa trying to make a ditch. so they gather one day saking each other of way to get water.

And one of these pearty said that there was man name Cea-gens who knows much about ditch, so the send for, when this Cea-vens) came to there camp. and told them that the must make a spath out of a tree call (Oie a came) so they work on for quite a while.

while the working this man Cea-ven went away for some reason, while he way. these poeple at mesa had a great trouble anong themself.

there where begain they war.

so they call a day, which these poeple to make Bows and arrows. Sho-jiak,[a] (Caveid)[b]

and so these poeple start way down near Florince and then come to Casa great Rounen, and so on to Casa Planco.

A mowan who's name (Stoke qui tham) his two son's one of them name (Parhane) another (Par-lrad)

one day when the were at home. thire mother told about an eagle of there owne. and one day these boy's wanted to go and see what there mother been told them. So the start for there Eagle.

when the were at the plaece. the youngest said to his brother. that he may try first. to clime up for the birds. he tryd But could not make. then the oldest one. got them. and bring them down. the youngest brother took the oldest bird. and there begain to quirral about these two birds, the oldest said to his brother that he might have the youngest becouse he was the youngest.

and the oldest might have the oldest too. But the youngest would not let his oldest bird go. becouse he was the first one that he took. and would not let his brother give what he got first.

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[a] Club. [b] Shield.

CHILDREN OF CLOUD

[Told by Inasa]

When the Hohokam dwelt on the Gila and tilled their farms about the Great Temple that we call Casa Grande there was chagrin among the young men of that people, for the prettiest woman would not receive their attentions. She would accept no man as her husband, but Cloud came out of the east and saw her and determined tc marry her. The maiden was a skillful mat maker, and one day she fell asleep when fatigued at her labor. Then Cloud sailed through the skies above and one large rain drop fell upon her; immediately twin boys were born.[a]

Now all the men of the pueblo claimed to be the father of these children. After enduring their clamors for a long time the woman told her people to gather in a council circle. When they had come she placed the children within the circle and said, "If they go to anyone it will prove that he is their father." The babies crawled about within the circle but climbed the knees of no one of them. And so it was that the woman silenced them, saying, "I wish to hear no one of you say, 'these are my children,' for they are not."

When the boys had reached the age of 10 they noticed that their comrades had fathers and they inquired of their mother, "Who can we call father? Who can we run to as he returns from the hunt and from war and call to as do our playmates?"

And the mother answered: "In the morning look toward the east and you will see white Cloud standing vertically, towering heavenward; he is your father."[b]

"Can we visit our father?" they inquired.

"If you wish to see him, my children, you may go, but you must journey without stopping. You will first reach Wind, who is your father's elder brother, and behind him you will find your father."

They traveled for four days and came to the home of Wind. "Are you our father?" they inquired.

"No; I am your uncle. Your father lives in the next house; go on to him." They went to Cloud, but he drove them back, saying: "Go to your uncle and he will tell you something." Again the uncle sent them to the father, and four times they were turned away from the home of each before their father would acknowledge them.

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[a] Bourke mentions this myth in his notes upon the Mohaves: "This Earth is a woman; the Sky is a man. The Earth was sterile and barren and nothing grew upon it; but by conjunction with the Sky (here he repeated almost the very same myth that the Apaches and Pimas have to the effect that the Earth was asleep and a drop of rain fell upon her, causing conception) two gods were born in the west, thousands of miles away from here." Journal of American Folk-Lore, II, 178.

[b] Among the Navahos Sun is the father of the twins who grow to manhood in four days and then set out to find their parent. See Washington Matthews, The Navajo Mythology, in American Antiquarian, V, 216, 1883.

"Show me that you are my children," said he; "if you are, you can do as I do." Then the younger sent the chain lightning with its noisy peal across the sky. The older sent the heat lightning with its distant diapason tones. "You are my children," exclaimed Cloud, "you have power like unto mine." As a further test he placed them in a house near by where a flood of rain had drowned the inmates. "If they are mortals," thought he, "they will be drowned like the others." Unharmed by the waters about them, the children demonstrated their power to survive, and Cloud then took them to his home, where they remained a long time.

When they longed to see their mother again, Cloud made a bow and some arrows different from any that they had ever known and gave to them. He told them that he would watch over them as they journeyed, and admonished them against speaking to anyone that they might meet on the way. As the boys were traveling toward the westward, they saw Raven coming toward them, but they remembered their father's injunction against speaking and turned aside so as not to meet him. They also turned aside to escape meeting Roadrunner, Hawk, and Eagle. Eagle said: "Let's scare those children." So he swooped down over their heads, causing the boys to cry from fright. "Oh, we just wanted to tease you, that's all; we don't mean to do you any harm," said Eagle.

Thus they journeyed on until they met Coyote. They tried to turn aside in order to avoid him, but he ran around and put himself in their way. Cloud saw their predicament and sent down thunder and lightning, and the boys by their magic power added to the bolts that flashed before the eyes of Coyote until he turned and fled.

It was on the mountain top that the boys were halted by Coyote, and one stood on each side of the trail at the moment when they were transformed into the largest mescal that was ever known. The place was near Tucson.

This is the reason why mescal yet grows on the mountains and why the thunder and lightning go from place to place—because the children did. This is why it rains when we go to gather mescal.[a]

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[a] A similar version of this myth was related to Lieutenant Emory by the interpreter of the Chief Juan Antonio Llunas. This man said: "That in bygone days a woman of surpassing beauty resided in a green spot in the mountains near the place where we were encamped. All the men admired and paid court to her. She received the tributes of their devotion—grain, skins, etc.—but gave no love or other favor in return. Her virtue and her determination to remain unmarried were equally firm. There came a drouth which threatened the world with famine. In their distress the people applied to her, and she gave corn from her stock, and the supply seemed to be endless. Her goodness was unbounded. One day as she was lying asleep with her body exposed a drop of rain fell on her stomach, which produced conception. A son was the issue, who was the founder of a new race which built all these houses."

When he was asked if he believed the story he replied: "No; but most of the Pimos do. We know, in truth, nothing of their origin. It is all enveloped in mystery." W. H. Emory, Notes of a Military Reconnoissance, S. Ex. Doc. 41, 83, 30th Cong., first sess., 1848.

SKULL AND HIS MAGIC

Once there was a pretty girl who was unwilling to marry anyone. All the young men brought presents of game to her parents, but none found favor in the eyes of the critical maiden. At last to the surprise of neighbors and kinsmen she chose for her husband one who was a man by night and a skull by day. Then all laughed at the marriage, saying, "One man in this valley has a bone for a son-in-law."

One morning the crier of the village made this proclamation: "To-day we hunt deer in the mountains to the northward!" Skull went ahead of the party and hid in a defile in the mountains. When the hunters came driving the game before them the deer all fell dead at the sight of gruesome Skull; so the people had an abundance of venison without the trouble of trailing and killing. Thus it was that Skull rose in their regard and ridicule was no longer heaped upon him.

The next day had been appointed for the foot race in which the runners would kick the ball. Skull entered as one of the contestants, though his neighbors laughed and said: "How can one ball manage another?" But when he reached the goal a winner the last voice of contumely was silenced.

ORIGIN OF THE HORSE

Two brothers who lived apart from their kinsfolk were skillful deer hunters. Day by day they followed the deer and antelope, and when their chase was successful they carried the game home on their shoulders. This was heavy work, and at last the elder in the goodness of his heart took pity on his younger brother, saying: "You must help me to carry out my plans and I shall become transformed into something that will be useful to you. Shoot an arrow through my body from front to back and another from side to side; cut me transversely into four pieces and throw them into the water. In four days you may come back and see what has happened."

When the younger man, sorrowing and wondering, had obeyed he returned to find four strange animals which we now call horses, two males and two females, colored black, white, bay, and yellow or "buckskin." He was not frightened, for his brother had given him warning, and he had provided himself with a rope, which he tied around the neck of one of the horses, took a half hitch in its mouth, and rode it home, driving the others.

Thereafter horses multiplied in Pimería and in time all were provided with mounts, though had it not been for the sacrifice of the good brother we should never have had any.

Another version

At the time when the Rsârsûkatc Ã-âtam confined the game animals in the cave at Aloam mountain[a] our people were living between Casa Grande and Tucson. Among them were two unhappy brothers, one blind and the other lame. One day as the elder was lamenting, crying, "Why am I lame?" and the other was saying, "Why am I blind?" they suddenly heard a peal of thunder and a voice said, "Take care! Take care!" At this they were frightened, and the younger opened his eyes to see and the elder sprang to his feet and walked.

Then they went to hunt for game, but the Rsârsûkatc Ã-âtam had cleared the ranges of every living thing that could supply the Pimas with food, so that the brothers wandered over mountain and mesa without success until they were gaunt with hunger. Then the elder told his brother that he would die for the latter's sake and that after a time the younger brother should return to see what had been the result of his sacrifice. When the young man returned he found two horses, a male and a female.

Nursery Tales

THE FIVE LITTLE ORPHANS AND THEIR AUNT

Five little Indians (not Pimas) were once left orphans because their parents had been killed by Apaches, and they got their aunt (their mother's younger sister) to come and live with them. She had no man, and it was very hard for her to take care of them. One day the children all went away to hunt, and they were met by five little rabbits (cottontails) in the mountains. The oldest of the rabbits came running to the children and crying, "Don't shoot me; I have something to tell you." So the children stood still and the rabbit said, "The Apaches have come to your place and burned down all the houses; you had better go home now." But the children surrounded the rabbit and killed it with an arrow and took it home.

When they reached home, they saw their aunt lying outside the ki in the shade, and something bloody near her. The oldest boy said, "Just look what auntie has been doing! She's been eating our paint and poisoned herself." But it was blood they saw coming out of her mouth, for the Apaches had come and killed her. When they came closer, they saw that a bunch of her hair had been cut off, and she looked so unnatural in death that they thought it was somebody else, and that their aunt had gone away. They had never seen a dead person before. So they said, "Let us dig a big hole and make a fire all day long and put hot stones in it, for she has gone to the mountains to

[a] Twenty-five miles southwest of Tucson.

get some mescal." So they did, and waited all day long till sunset, when she usually came, but she did not come. Then they said, "She has gone far and has a heavy load and is waiting for us to come and help her; let us go." But the oldest boy said, "No, she will come anyway, she always does, even if she has a heavy load." So they waited till night, and gave her up, and went into the house to sleep; but they kept their sandals on, as the Pimas always did, so they could start off quickly if there were danger.

In their sleep they heard her coming in her sandals, groaning and murmuring, so they all got up and went outdoors. They heard her go and look into the fire pit, and then come and stand in their midst. One said, "I think it is a ghost;" so they turned to the right and ran around the ki, and she followed them around and around. Finally they all went inside, still pursued, and the children stood on each side of the door and turned into stone. And the woman went away.

COYOTE AND THE QUAILS

Once Coyote was sleeping very soundly and a great number of quails came along and cut pieces of fat meat out of him; then they went on. Just as they were cooking the meat Coyote overtook them and said, "Oh, where did you get that nice fat meat? Give me some." They gave him some, and after he had eaten all he wanted he went on. When he had gone a little way, the quails called after him, "Coyote, you ate your own meat."

"What did you say?"

"Oh, nothing; we heard something calling behind the mountains."

Presently they called again, "Coyote, you ate your own meat."

"What?"

"Oh, nothing; we heard somebody pounding his grinding stone."

So Coyote went on; but finally he felt his loss, and then he knew what the quails meant. So he said he would eat them up, and turned around after them. The quails flew above ground, and Coyote ran under them. Finally the quails got tired, but Coyote did not, for he was angry and did not feel fatigue.

By and by they came to a hole, and one of the smartest quails picked a cholla cactus branch and pushed it into the hole, and they all ran in after it. Coyote dug out the hole, and when he came to the first quail he said, "Was it you that told me I ate my own meat?" "No," said the quail, so he let him go, and he flew away. The next one he asked the same question and received the same reply, and let him go; and so on till the last quail was gone, and he came to the cactus branch. This was so covered with feathers that it looked like a quail, and the Coyote asked it the same question. There was no answer, and Coyote said, "I know it was you, because you do not answer." So he bit into it very hard and it killed him.

THE WOMAN AND COYOTE

Once the river rose very high and spread over the land. An Indian woman was going along with tortillas in a basket on her head, and she waded in the water up to her waist.

Coyote was afraid of the water, so he was up in a cottonwood tree. When he saw the woman he said, "Oh, come to this tree and give me some of those nice tortillas."

"No," said the woman, "I can not give them to you; they are for somebody else."

"If you do not come here I will shoot you," said Coyote, for he was supposed to have a bow. So she came to the tree and said, "You must come down and get them, for I can not climb trees." Coyote came down as far as he dared, but he was afraid of the water. Then the woman said, "Just see how shallow it is, only up to my ankles." But she was standing on a big stump. Coyote looked and thought it was shallow, so he jumped down and was drowned. And the woman went on.

THE PIMA BOY AND THE APACHES

An old woman once lived with her grandson. The boy's father had been killed by the Apaches and his mother taken captive. They had treated the woman very badly and burned her arms with hot ashes and coals and made big scars. The boy had heard these stories about his mother.

The boy and the old woman had a very hard time getting along, and he used to go where certain persons were grinding corn and brush a few grains as they fell from the metate into his blanket and carry them home and the grandmother would make soup of them, and that was the way they lived. But by and by these people went away and when the boy went to get some corn there was none there and he had nothing to take home. The grandmother scolded him and told him to go back; and when he refused she whipped him. Then he said, "I know where my mother is, and I am going to her." The old woman said, "No, you must not; the Apaches will kill you." But he said, "I am going; my mother will not let them harm me." So he went. His grandmother trailed him to the mountains, and finally from the very highest peak she saw him going along toward the camp. She also saw his mother, her daughter-in-law, out alone gathering seeds. She recognized her at a distance by the shining of her scars. The old woman ran after the boy, but when she caught up with him he stepped aside and turned into a saguaro. Then after she had turned around and gone back he resumed his form and went on to his mother.

When she saw him she cried out, "Don't come near me, the Apaches will kill you; you know what they did to me, and they will kill you."

"What can I do?" he said, "What do the Apaches like?"

"They like little doves."

"Then I will turn into a little dove."

He did this and she carried him home in her basket. The Apaches asked, "What is that?" and she replied, "The young of a dove; so I brought it home." But when the Apaches left the room they could hear her talking to it, and when they came in she would be still. They could not understand the words but knew she was speaking her own language, so they said, "This thing belongs to her tribe. Let us kill it."

So they went in and the chief took it in one hand and smashed it hard with the other and the pieces came through between his fingers. These pieces then flew up out of the smoke hole and turned into a flock of hawks, and they fell upon the Apaches and beat them all to death with their wings.

Then they turned back into the boy again and he and his mother started home. But when they reached the place where the grandmother had turned back they could go no farther. They turned into saguaros, one on each side of the road.

THE BIRDS AND THE FLOOD

When the waters covered all the earth two birds were hanging onto the sky with their beaks. The larger was gray with a long tail and beak; the smaller was the tiny bird that builds its nest like an olla, with only a very small opening to get in. The larger one cried and cried, but the other just held on tight and said, "Don't cry. You see that I'm littler than you, but I'm very brave. I don't give up so easily as you do. I trust in God; He will take care of those in danger if they trust in Him."[a]

DEATH OF COYOTE

After the waters had gone down Elder Brother said to Coyote, "Don't touch that black bug, and do not eat the mesquite beans; it is dangerous to harm anything that came safe through the flood." So Coyote went on, but presently he came to the bug, and he stopped and ate it up. Then he went on to the mesquite beans and looked at them and said, "I will just taste one, and that will be all." But he stood there and ate and ate till they were all gone. And the beans swelled up in his stomach and killed him.

THE BLUEBIRD AND COYOTE

The bluebird was once a very ugly color. But there was a lake where no river flowed in or out, and the bird bathed in this four times every morning for four mornings. Every morning it sang:

Ga'to setcu'anon ima rsoñga.
Gunañursa,
Wus'sikâ sivany tcutcunoña.

[a] This sentence is clearly inspired by Christian teachings.

(There's a blue water, it lies there.
I went in,
I am all blue.)

On the fourth morning it shed all its feathers and came out in its bare skin, but on the fifth morning it came out with blue feathers.

All this while Coyote had been watching the bird; he wanted to jump in and get it, but was afraid of the water. But on that morning he said, "How is this all your ugly color has come out of you, and now you are all blue and gay and beautiful? You are more beautiful than anything that flies in the air. I want to be blue, too." Coyote was at that time a bright green. "I only went in four times," said the bird; and it taught Coyote the song, and he went in four times, and the fifth time he came out as blue as the little bird.

That made him feel very proud, because he turned into a blue coyote. He was so proud that as he walked along he looked about on every side to see if anyone was noticing how fine and blue he was. He looked to see if his shadow was blue, too, and so he was not watching the road, and presently he ran into a stump so hard that it threw him down in the dirt and he became dust-colored all over. And to this day all coyotes are the color of dirt.

THE BOY AND THE BEAST

Once an old woman lived with her daughter, son-in-law, and grandson. They were following the trail of the Apaches. Whenever a Pima sees the track of an Apache he draws a ring around it with a stick, and then he can catch him sooner. But at night while they were asleep the Apaches came and grasped the man and woman by the hair and shook them out of their skins as one would shake corn out of a sack, and the old woman and the boy were left alone. They had to live on berries, but in one place a strange beast, big enough to swallow people, camped by the bushes. The grandmother told the boy not to go there, but he disobeyed her; he took some very sharp stones in his hands and went. As he came near the animal began to breathe and the boy just went inside of him and was swallowed all up. But with his sharp stones he cut the intestines of the beast so that he died. When the grandmother came to hunt for the boy he came out to meet her and said, "I have killed the animal."

"Oh, no; such a little boy as you are to kill such a dangerous beast!"

"But I was inside of him; just look at the stones I cut him with."

Then she went up softly and saw the holes and believed. And after that they moved down among the berries and had all they wanted to eat.

THE THIRSTY QUAILS

A quail had more than 20 children and with them she wandered over the whole country in search of water and could not find it. It was very hot and they were all crying, "Where can we get some water? Where can we get some water?" but for a long time they could find none. At last, away in the north, under a mesquite tree, they saw a pond of water, but it was very muddy and not fit to drink. But they had been wandering so many days and were so tired that they stopped in the shade, and by and by they went down one by one and drank the water, although it was so bad. But when they had all had enough it made them sick and they died.

THE NAUGHTY GRANDCHILDREN

An old woman had two bright grandchildren. She ground wheat and corn every morning to make porridge for them. One day as she put the olla on the fire outside the house, she told the children not to fight for fear they would upset the water. But they soon began quarreling, for they did not mind as well as they should, and so spilled the water, and the grandmother had to whip them. They became angry and said they were going away. She tried to make them understand why she had to whip them, but they would not listen and ran away. She ran after them, but could not catch up. She heard them whistling and followed the sound from place to place, until finally the oldest boy said, "I will turn into a saguaro, so I shall last forever, and bear fruit every summer." And the younger said, "Well, I will turn into a palo verde and stand there forever. These mountains are so bare and have nothing on them but rocks, so I will make them green." The old woman heard the cactus whistling and recognized the voice of her grandson; so she went up to it and tried to take it into her arms, and the thorns killed her.

And that is how the saguaro and palo verde came to be.

Abstracts of Myths

THE CREATION MYTH

Out of primeval darkness spirit of Earth Doctor developed. He first created creosote bush from dust. Next created black ants and termites; these caused the world to develop and Earth Doctor created the sky. Then made gray spider and commanded it to spin web connecting edges of earth and sky. Threw blocks of ice into the sky for sun and moon and spray of water for stars; large stars made from magic crystal, and milky way by walking stick dipped in ashes. All living things then created and human beings from images of clay. Earth became overpopulated, as there was no death yet,

so Earth Doctor pulled the sky down on the earth and crushed everything to death. But he came through a hole to the other side and made a new creation. After a time Elder Brother, a rival to Earth Doctor, arose and threatened to destroy the people again. This accomplished, through the child of Elder Brother's agent and South Doctor's daughter, who was the last of the youth's many wives. Child was abandoned and its tears caused a flood that overwhelmed the earth. Elder Brother was saved in his olla, Coyote on a log, father and child by turning into birds, Earth Doctor by hiding in his staff, and some people by going into a hole in the earth made by Earth Doctor.

After the flood Elder Brother was the ruler and Earth Doctor and Coyote his subordinates. When they found the middle of the land they all took part in a new creation. First death caused by Rattlesnake biting Rabbit. Burning corpse stolen by Coyote; afterwards he abused the woman and in retaliation the magicians concealed all the useful animals in a cave; these released by Coyote.

Väntre supplied with magic gambling sticks by Feather-breathing Si'van^{y}. Elder Brother interfered and caused Väntre to be turned into an eagle. Eagle lived on mountain and preyed on the people until killed by Elder Brother.

Tarsnamkam sent his parrot to steal turquoises at Casa Grande; sent football to daughter of Si'van^{y} there; child born from this became the monster Hâ-âk, who killed and ate children until destroyed by Elder Brother. Tobacco plant grew from grave of old woman who had stolen Hâ-âk's blood.

Elder Brother fell into disfavor with the people, who killed him several times, but he always came to life again, until the magic power of Vulture was invoked, who killed him through the agency of the sun. Came to life once more, but sank through a hole to the underworld, where the survivors of the flood lived. Some of these came above under his leadership and conquered the people there.

COYOTE

After closing up by his laughter the hole through which the underworld people were coming up, Coyote wandered to the west, and one day made two other coyotes from his image in the water, Sandy Coyote and Yellow Coyote. They sailed on logs across the water, but Yellow became blind and they turned back and went to live near the Grand Canyon. Gambled with each other and Sandy won; Yellow assisted by Finish, who causes Duck and Black Beetle to run a race, in which latter won for Yellow. Sandy finally won Yellow's body and soul and killed him. Death finally avenged by his son, who won from Sandy by stratagem.

CHILDREN OF CLOUD

Twin boys immediate result of marriage of Cloud and the beautiful mat maker, who had refused all suitors. Boys grow up, inquire for father, sent to the east to find him. Meet Wind, their uncle, and Cloud, their father. Tested by rain, thunder, and lightning, and accepted. After long visit start for home; encounter Raven, Hawk, Eagle, and Coyote; stand on each side of trail to avoid latter and are transformed into mescal.

SKULL AND HIS MAGIC

Man by night and Skull by day, he married maiden who had refused other suitors. Successful hunter because deer fell dead at sight of him. Winner in football race, thus silencing all ridicule.

ORIGIN OF THE HORSE

Two brothers burdened with heavy game. One conceives plan of relief and asks other to help him. Latter cuts body of former into four pieces and throws them into a lake; in four days returns and finds four horses.

Abstracts of Nursery Tales

THE FIVE LITTLE ORPHANS AND THEIR AUNT

Parents killed by Apaches and unmarried aunt supported children. While hunting one day warned by cottontail rabbit that Apaches had been at their house. On return find aunt dead, but never having seen a corpse did not recognize her. With mescal kept fire against her return; at night frightened and pursued by her ghost until all turned to stone.

COYOTE AND THE QUAILS

Quails cut pieces of fat from Coyote as he slept; he awakened and overtook them in camp; asked for refreshment and was given of his own flesh; starting on he was taunted about it by the quails. Turned to pursue them and almost ran them down when they ran into a hole, the foremost carrying a cholla stem. Coyote asked each in turn if she were guilty; on denial, let them go; finally asked cholla, and receiving no reply, bit it hard and it killed him.

THE WOMAN AND COYOTE

Coyote in cottonwood tree asked woman wading in river to give him some of her tortillas; she refused, but on being threatened went up to tree and told him to jump down, as the water was shallow; but she was standing on a stump; when he jumped he was drowned in the deep water.

THE PIMA CAPTIVE AND HER SON

Boy whose mother captured by Apaches lived with his grandmother. Quarreled with her and started to find his mother. Reaching her he turned into a dove, and she carried him home; Apaches heard her talking in her language to it, so the chief crushed it in his hand; pieces flew up through the smoke hole and turned into flock of hawks, who beat the Apaches to death. Mother and son started home, but turned into saguaros on the way.

COYOTE AND THE BLUEBIRD

Bird became blue by bathing in lake. Taught Coyote how, and he became blue, too. So proud that he gazed at himself as he went along and ran into a stump, fell into the dust, and became gray, as he is to-day.

THE BOY AND THE BEAST

Parents killed by Apaches and boy lived with grandmother. Frightened from berry bushes by terrible beast. Boy took some sharp stones and approached the beast, who swallowed him; cut his way out with the stones and thus killed the beast.

THE NAUGHTY GRANDCHILDREN

Quarreled with grandmother and ran away; when pursued the boy turned into a saguaro and the girl into a palo verde. Old woman grasped the cactus and it killed her.

RELIGION

DEITIES

The Pimas are far less given than their pueblo neighbors to the outward show of religion, such as is seen in the varied and frequent ceremonies of the Hopis and Zuñis. On the contrary, they appear to have no other than an occasional "rain dance," the navitco (see p. 326), and other ceremonies for the cure of disease. So far as could be ascertained in a comparatively brief sojourn among them their religion comprised a belief in the supernatural or magic power of animals, and especially in the omnipotence of the Sun. When in mourning, sick, or in need, the Pima addressed his prayers to the Sun in the morning: Tars! Oek i'up sĭnhâ-ĭkuĭ-ĭtûk iup ĭn'yĭmak kuv'kutûki! "Sun! Kindly help me through the day!" Or at nightfall his petition was raised: Stcoho'komam! Oek iup sĭnhâ'ĭkuĭ-ĭtûk iup ĭnyĭmak kukutûki! "Darkness! Kindly help me through the night!" The following form of supplication was often employed: Tars! Pa'pûtitcû sĭnhâ'ĭ-iku[ldi], contracted from Tars! Pa'pût itcok'si sĭnhâ'ĭkuĭt, "Sun! There, have mercy on me." When weary upon a journey, the

Sun was appealed to, and the first whiff of cigarette smoke was puffed toward him. The disk was not regarded as the "shield" or "head-dress," but as the veritable person of the god. He moves unceasingly around the flat earth, going beneath the western rim and passing across below to rise in the east.

It is Sun that, by means of magic power, kills those who die during the day. It is Night who kills those who die during the hours of darkness. Moon is Sun's wife, but she is not accredited with the power that is given to Darkness. Coyote is the child of Sun and Moon, and figures largely in the myths. His character, by its buffoonery and trickery, much resembles that of the culture heroes of some other tribes.

At the present time two deities are recognized, Tcu'wut Makai, Earth Magician (medicine-man or doctor), and Si'ûû, Elder Brother. They live in the east, dividing the control of the universe between them. The former governs the winds, the rains, etc.; sometimes he is called Tciors, Dios [Spanish]. Their names are pronounced when a person sneezes, or, he may simply exclaim "pity me," referring tacitly to one or the other of these two deities. There is a puzzling mingling of the old and the new in the myths, though it seems probable that the greater part of them have been of ancient origin with recent adaptation of Earth Doctor and Elder Brother from the Christian religion. Among the Pimas themselves opinion is divided as to whether the myths have been largely adopted from the Papagos.

At the solstitial point in the northeast lives Tcopiny Makai, Sinking Magician, who also has a "house" in the northwest. In the southeast lives Vakolif Makai, South Magician, who also occupies the corresponding point in the southwest. Along the Sun's path are the houses of the four minor gods:

Wupuki Makai, Lightning Magician, is the southernmost, and when the Sun is in his neighborhood we have lightning that is not accompanied by thunder.

Toahĭm Makai, Thunder Magician, causes the thunders that are heard during the second month.

Huwult Makai, Wind Magician, produces the strong winds that blow so continuously in the spring.

Tâtrsaki Makai, Foam Magician, causes the river to rise and bear foam upon its waves in the month succeeding the month of wind.

It is difficult to determine the exact position of Coyote in the Pima pantheon, though he is classed with the leading deities in the myths, and his modern but degenerate descendants are regarded as very wise.

When a coyote comes by moonlight and sees the shadow of a chicken he can pounce upon the shadow and so bring down the bird within reach. He has been known to steal a baby from between its

sleeping parents, an informant declared. Considering the manner in which the moon is supposed to have originated, it is strange that it should contain the figure of a coyote. No explanation of this belief was found.

The stars are living beings: Morning Star is the daughter of a magician; her name is Su'mas Ho'-o, Visible Star. Polaris is the Not-walking Star, but is otherwise not distinguished from his fellows. Possibly this term has been adopted since the advent of the whites. Once a mule with a pack load of flour was going along in the sky, but he was fractious and not gentle, as is the horse. He bucked off the load of flour, which was spilled all along the trail. A part of it was eaten by Coyote, but some remains to form the Milky Way.

THE SOUL AND ITS DESTINY

The soul is in the center of the breast. It makes us breathe, but it is not the breath. It is not known just what it is like, whether it is white or any other color.

The views of the Pimas concerning the destiny of the soul varied considerably. Some declared that at death the soul passed into the body of an owl. Should an owl happen to be hooting at the time of a death, it was believed that it was waiting for the soul. Referring to the diet of the owl, dying persons sometimes said, "I am going to eat rats." Owl feathers were always given to a dying person. They were kept in a long rectangular box or basket of maguey leaf. If the family had no owl feathers at hand, they sent to the medicine-man, who always kept them. If possible, the feathers were taken from a living bird when collected; the owl might then be set free or killed. If the short downy feathers of the owl fell upon a person, he would go blind. Even to-day the educated young people are very chary about entering an abandoned building tenanted by an owl.[a]

By some it is said that after death souls go to the land of the dead in the east.[b] All souls go to Si'alĭk Rsân, Morning Base, or

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[a] "Having been asked what information they possessed of their ancestors (*antepasados*), they told me about the same things as (*lo mismo poco mas ó menos que*) the (Pimas [Maricopas?]) Gileños said to the señor comandante, and Padre Font put in his diary, concerning the deluge and creation; and added, that their origin was from near the sea in which an old woman created their progenitors; that this old woman is still somewhere (*quien sabe en donde*), and that she it is who sends the corals that come out of the sea; that when they die their ghost (*corazon*) goes to live toward the western sea; that some, after they die, live like owls (*tecolótes*; and finally they said that they themselves do not understand such things well, and that those who know it all are those who live in the sierra over there beyond the Rio Colorado." Garcés' Diary in Coues, On the Trail of a Spanish Pioneer, I, 122.

"After death Mohaves become spirits; then they die again and become a kind of an owl; a second time they turn into a different kind of an owl, and a third time into still another; fourthly, they become water beetles; after that they turn into air.

"If anything is left of their bodies, the arms, the muscles of the upper arms become one kind of an owl, and the heart another." J. G. Bourke, Journal of American Folk-Lore, II, 181.

[b] Compare the Navaho belief, as recorded by Matthews: "For is it not from the west that the snow comes in the winter, the warm thawing breezes in the spring, and the soft rains in the summer to nour-

place where the sun rises. The East Land is separated from the land of the living by the chasm called Tcu'wut Hi'ketany, Earth Crack. When one of the writer's interpreters had gone to school at Hampton, Va., her associates said that she had gone to the abode of spirits. All is rejoicing and gladness in that other world. There they will feast and dance, consequently when one dies his best clothing must be put on and his hair must be dressed with care, as is the custom in preparing for an earthly ceremony. No idea of spiritual reward or punishment for conduct in this life exists.

Again, the souls of the dead are supposed to hang about and perform unpleasant pranks with the living. They are liable to present themselves before the living if they catch the right person alone at night. The ghost never speaks at such times, nor may any but medicine-men speak to them. If one be made sick by thus seeing a ghost, he must have the medicine-man go to the grave of the offending soul and tell it to be quiet, "and they always do as they are bid." Old Kisatc, of Santan, thought that the soul continued to reside in the body as that was "its house." During his youth he had accompanied a medicine-man and a few friends to the grave of a man who had been killed near Picacho, about 40 miles southeast of Sacaton. The medicine-man addressed the grave in a long speech, in which he expressed the sorrow and regret of the relatives and friends that the corpse should thus be buried so far from home. Kisatc avers that the spirit within the grave replied to the speech by saying that he did not stay there all the time, but that he occasionally went over to hang about the villages, and that he felt unhappy in the state in which he found himself. Of course the medicine-men claim to be in communication with the spirits of the departed as well as with supernatural beings capable of imparting magic power.

DREAMS

Dreams are variously regarded as the result of evil doing, as a natural and normal means of communication with the spirit world, and as being caused by Darkness or Night. During the dream the soul wanders away and passes through adventures as in the waking hours. The young men never slept in the council ki for fear of bad dreams.

To dream of the dead causes sickness in the dreamer and if he dream of the dead for several nights in succession he will die. Dreams are not consulted for information concerning future action except in

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ish the corn in the valleys and the grass on the hills? Therefore it is that when we are in need we pray to Estsanaltehi, the Goddess of the Sunset Land.

"But first man and first woman were angry because they were banished to the east, and before they left they swore undying hatred and enmity to our people. And for this reason all evils come from the east—smallpox and other diseases, war, and the white intruder." The Navajo Mythology, in American Antiquarian, v, 224, 1883.

the case of the would-be medicine-man who may be called to his profession by means of persistent dreams. Since Night may cause one to dream as he wishes it is fair to presume that it is that god who oversees the destinies of the medicine-men.

Many years ago Kisatc, in either a swoon or trance, believed that he went far away to a place where a stranger gave him a magnificent bow and a set of beautiful arrows. On regaining consciousness he asked for the things that had been given him while he was away and became quite indignant when they assured him that he had not been out of their sight. To this day he believes that they deceived him.

SACRED PLACES

Hâhâtesumiehĭn or Hâhâtai s'maihĭsk, Stones Strike, is a large block of lava located in the eastern Santan hills (see pl. XLI, *b*). The largest pictograph ever seen by the writer in the Southwest is cut upon it and 2 or 3 tons of small angular stones foreign to the locality are piled before it. There are also many pictographs on the bowlders round about. This was probably a Hohokam shrine, though it is regarded with reverence by the Pimas, who still place offerings of beads, bits of cloth, and twigs of the creosote bush at the foot of the large pictograph. There is a tradition that a young man was lying asleep upon the flat rock and was seen by two young women who were passing along the opposite hillside. They tried to awaken him by tossing the pebbles which are yet to be seen. Pima maids thus awaken their lovers to the present day.

Hâ-âk Vâ-âk, Hâ-âk Lying, is a crude outline of a human figure situated about 5 miles north of Sacaton. It was made by scraping aside the small stones with which the mesa is there thickly strewn to form furrows about 50 cm. wide (fig. 102). The body furrow is 35 m. long and has a small heap of stones at the head, another at a distance of 11 m. from the first, and another at the junction of body and legs. The latter are 11 m. long and 1 m. apart. The arms curve outward from the head and terminate in small pyramids. In all the piles of stone, which have a temporary and modern appearance, are glass beads and rags, together with fresh creosote branches, showing that the place is yet visited. The beads are very old and much weathered. Beside the large figure is a smaller one that is 4.5 m. long, the body being 2.7. Hâ-âk is supposed to have slept one night at this place before reaching Hâ-âk Tcia Hâk, a cave in the Ta-atûkam mountains, where she remained for some time.

I'aksk', Place of Sacrifice, is a heap of stones on a knoll near Blackwater where it is probable that a Hohokam or Pima medicine-man has been buried.

Pat'anĭkäm, Place of the Bad One, is the name of a grave at Gila Crossing. It seems probable that the grave of some Hohokam medicine-man has been taken for that of the son of Kâkanyp.

There is another similarly inclosed but unnamed grave at Gila Crossing, also one between Sweetwater and Casa Blanca, and there are three at Blackwater. Such inclosures are called o'namûksk, meaning unknown. Beads are to be found strewn about all of them.

Ma'vĭt Vâ-âk, Puma Lying, or Tci'apatak, Place of the Mortar, is a heap of small stones (pl. XLI, *c*) between the Double buttes, 10 miles west of Sacaton. Stones are there piled over a shallow mortar in which beads have been placed and partly broken. Bunches of fresh creosote branches were mingled with the decaying fragments of arrow shafts at the time of the writer's visit, showing that while the shrine

FIG. 102. Hâ-âk altar.

is yet resorted to it is of considerable antiquity, for wood does not decay rapidly in that climate.

Evil spirits dwell in the Picacho and Estrella mountains, but this belief may be presumed to be an inheritance from the Apache period. The writer has not learned of any shrines being located in those ranges.

It is said that in the Santa Rosa mountains there was once a tightly covered medicine basket which was kept on a mountain top by a Papago medicine-man who carried offerings to it. All others were forbidden to touch it; but someone found it and when he lifted the cover all the winds of heaven rushed forth and blew away all the people thereabout.

Near the summit of one of the lava-formed Santan hills is a small cave in which the Hohokam placed sacrifices. A number of articles were discovered there a quarter of a century ago and sent to some eastern museum. Since that time the Pimas deposited the body of a child and some other things in the cave, which were secured by an Arizona collector in 1901. The cave is known as Va'rsa Vâ'-âk, Basket Lying, because it contained a basket such as the Pimas use for their medicine paraphernalia. It was discovered by two Pima warriors, who were serving their sixteen-day period of lustration for having killed Apaches. The basket contained sinew from the legs of deer, and sticks, which the finders assumed to be for the same purpose as those with which they were scratching their own heads at the time.

When a medicine-man dies his paraphernalia, if not transmitted to his descendants, may be placed in an olla and hidden under a heap of stones in the hills. He may also sacrifice a part of his stock in a similar way during his lifetime. The property of warriors is sometimes similarly cached.

Such places were formerly respected by the tribe, but they are now robbed with impunity to get "relics" to sell. A man at Pe-e'pûtciltk' informed the author's interpreter, José Lewis, of the location of one of these caches in the low hills south of Casa Blanca. We found that a number of concretions, crystals, shells, a bird carved from stone, and a war club had been deposited in an olla with a bowl turned over it, rendering it water-tight. The whole had been hidden under a heap of stones at the summit of a spur of the hill about 4 miles from the villages.

Medicine-men

There are three classes of medicine-men among the Pimas. Those who treat disease by pretended magic are known as Si'atcokam, Examining Physicians. As many women as men belong to this order, to which entrance is gained chiefly through heredity. This is the most powerful class in the community, though its members pay for their privileges at imminent risk. How great this risk is may be seen from the calendar records, page 38. The Si'atcokam were more numerous than the other classes. Those who have power over the crops, the weather, and the wars are called Makai, Magicians. Only one or two women were ever admitted to this order among the Pimas. There were usually about five Makai in each village. These two classes were the true rulers of the tribe, as their influence was much greater than that of the chiefs. Their combined strength was for years turned against the missionary, Rev. C. H. Cook, but their influence is now fast waning and several medicine-men have become avowed Christians. From these converts information was obtained that in all probability could not have otherwise been secured.

Yet another class of persons, including both men and women, and few in number, might be termed medicine-men. They are called Hai'-itcottam, Something given to drink. They are not highly esteemed, however skilled they may become in the use of roots and simple remedies, yet they are the true physicians of the Pimas. It may be that among the many empiric remedies which they employ some will be found to possess true therapeutic qualities.

The traditional history of the tribe tells of many families of medicine-men, and the profession was very generally handed down from father to son. Those receiving magic power in this manner were somewhat more highly regarded than others. A second method by which a person might secure power was by what might be termed a process of natural selection; anyone who recovered from a rattlesnake bite on the hand or near the heart might become a medicine-man or medicine-woman. A third method was by dreams and trances. Kisatc said that during his youth he had dreamed every night that he was visited by some one who endowed him with magic power. Under the influence of these dreams he decided to become a medicine-man, but as soon as he began to practise the dreams ceased. These dreams are not sought by fasting or other unusual conditions, nor does the person to whom they come seclude himself from his fellows.

Several informants declared that "any man who received instruction from a medicine-man and learned to do some little tricks could become a medicine-man." The process of acquiring power was called va'ĭkita, "getting power" (literally, "pouring in olla"). The novice was tested, either alone or along with one or more fellow-aspirants, by the medicine-man, who had the youth kneel before him on all fours, and then threw four sticks, each about 8 inches long, at him. If the novice fell to the ground during the throwing he was "shot" with the power and could then take the next degree. This was administered by the instructor, who "coughed up" tcu'tcaka (word of unknown meaning), white balls the size of mistletoe berries, and rubbed them "into" the breast of the novice. Another informant said that the novice swallowed the balls. Four or five balls were thus administered, though the "power began to work" in some cases where only one or two balls were used. One informant thought that the medicine-man had a sort of "nest of power" wherein the balls developed as in the ovary of a hen. No matter how many were given off the supply continued undiminished.

Sometimes the doctor wished to teach the youth, in which case the latter paid nothing for his instruction.[a] But the usual fee was a

[a] "The Indians of the nation of Loretto had schools, whereby these professors instructed their youths in the above opinions, and some other needless puerilities: but recommended to them as truths of great importance. In order to this, their pupils attended them to caves or solitary places, at a distance

horse, "a piece of calico," or the like. Throughout the period of his initiation the novice was not permitted to go near a woman's menstrual lodge nor might he allow anyone to know that he was learning; that implied that he should not practise until the end of the novitiate period, usually two years, sometimes four. When at length he began to practise his success depended on his ability to develop dreams and visions.

While the Si'atcokam can induct any young man into the mysteries of the order, that man's son can not inherit his father's profession.

Legerdemain

The Makai were intrusted with the important duty of securing supernatural aid to insure good crops. One method of procedure was to gather the people in the large lodge and have some one bring in an olla filled with earth. This the Makai stirred with a willow stick and placed before a clear fire, where it stood all night while rain songs were being sung. At dawn the olla was emptied and was found to contain wheat instead of earth. Four grains were given to each one present, to be buried at the corners of the fields or the four grains together at the center.

For a consideration the Makai would go to a wheat field and perform rites which he assured the owner would result in a heavy yield of wheat. After rolling and smoking a cigarette at each corner of the field, he would go to the center of it and bury a stick (â'mĭna) 3 or 4 inches long.

To cause an abundance of melons and squashes, the Makai entered the field and took from his mouth—or, as his followers supposed, from the store of magic power in his body—a small melon or squash. The object was partially covered with hardened mud, symbolic of the productive earth. The rite was performed at a time when no melons or squashes had yet appeared, and it is supposed that he obtained the "magic" melon by stripping the outer leaves from the growing end of young vines. This was buried at the root of a growing plant to insure a prolific yield.

Again, the germination and growth of wheat were sometimes imitated by concealing several grains of wheat in the hair and shaking them down upon the soil. Then by a dextrous manipulation of a previously prepared series of young wheat shoots the growth was represented up to the point where a stalk 2 feet in length was

from the woods: and there they taught them to form certain figures on tablets, and when perfect in these, they were taught others, as children in our schools are taught to write. . . . But their most usual device was to hold up in their hands some little tablets of wood made with great labour, for want of iron tools of mesquite, or another hard wood called Una de Gato, on which were painted some grotesque figures, affirmed to be the true copy of the table, which the visiting spirit left with them at his departure to heaven: and these figures were the same which the Loretto professors [medicine-men] taught the boys at their private academy." Venegas, History of California, I, 98, 100.

slipped from the long coils of hair at the operator's shoulders and shown to the awe-stricken spectators as a fully developed plant.

A favorite trick was to have young men chew mesquite leaves, which on being ejected from the mouth were seen to be wheat or corn.

During the rain ceremonies, when the Makai were at the height of their glory, one of their most impressive acts was to pour dry earth out of a reed until it was half empty and then it would be seen that the remainder was filled with water. "Then it rained right away." If the Makai put one of the magic slates in a cup of water at the time the rain songs were being sung and also dug a shallow trench to show the rivulets how they should cut their way, it would rain in four days.

Another device of the Makai was to conceal reeds filled with water and then while standing on a house top to direct the singers to stand in a close circle around below him. Exhibiting a handful of eagle down or eagle tail feathers and throwing dust on them to show how dry they were, he would then sweep his hand about and scatter water over the spectators and singers, apparently from feathers but in reality from the reeds.

During the season when rain is especially needed any one may petition for it by means of the small gray fly that has a large head. Rubbing soot from the roof or chimney in the fly's eyes the person must say, "Go quickly, little fly, tell your grandmother to send the rain."

Some Si'atcokam arouse the wonder and admiration of their fellows by placing hot coals in their mouths (where they hold them between the teeth), or by holding them in their hands (taking care to have a thin layer of ash or mud beneath them).

When the exigencies of the case demand it, the Si'atcokam sink small pointed pieces of wood, an inch in length and flat at the larger end, into the flesh of their patients. The bits of wood are "twisted back and forth between the thumb and forefinger as one would twist a thread until the wood disappears." The great grandmother of Jacob L. Roberts, a young man of Apache-Maricopa and Pima-Kwahadk' lineage, thus treated him during a temporary attack of sickness in his infancy. She sank two pieces of creosote bush into his breast and predicted that he would not be ill as would other children. She also said that she would die within the year—and she did. Strange to say, Jacob also escaped the epidemic diseases that afflicted his playmates.

The Si'atcokam prize certain crystals very highly and claim to obtain them in the following manner: The person possessing the necessary power may be going along in some quiet place when all of a sudden a man will be seen approaching. The stranger never reaches him but will be seen to disappear; then if the Si'atcokam searches about

the spot where the man was last seen, he will find a transparent crystal, hâ'tai tân'tam, stone white, which contains a spirit that will aid him in all his subsequent undertakings and which will desert the stone at the death of the holder.[a]

The Si'atcokam treats a wounded man by sucking the evil from the wound. He shows a strand of green that resembles a roll of water plants about 8 inches long. The wounded man sucks this crosswise four times and the Si'atcokam pretends to swallow it. "This insures complete recovery."

Cause and Treatment of Disease

The Si'atcokam carries his tcaekut or staff in hand when called to treat the sick. He begins by singing the "cure songs" or causing them to be sung for the purpose of aiding him in correctly diagnosing the case. Then he puffs out cigarette smoke over the body of the patient in order that he may "see" the disease. Most common ailments are attributed to certain definite causes and the diagnosis is easy. When he is well paid for his services he may sing more than one night before announcing the name of the disease. If he is too hasty he may "see" the bear when it is really the deer that is causing trouble. However, he can not sing more than four nights; then, if he fails, he must call in a fellow-practitioner. The case of Sala Hina is an interesting and instructive one and will illustrate very adequately these peculiar methods. Several years ago Sala carelessly ate some weed which poisoned her and she had barely strength enough to reach home. As close relatives are not allowed to treat a patient, a neighboring medicine-man was called in. Her husband rolled a cigarette for the learned doctor, who smoked it, but however skillfully he spread the smoke cloud over the groaning patient he could not "see" the cause of the trouble. Then another Si'atcokam was called in and a cigarette was rolled for him and he peered through the veil sufficiently to see "something." But he could not tell just what it was and advised sending for another medicine-man who was a specialist in intangible shapes. Sala was suffering the greatest agony in the meantime. If she moved she "felt full of pins inside." Those about her expected her to die at any moment. Number three at length arrived and smoked his cigarette, blowing the smoke across the patient from a distance to dispel the unusually heavy darkness. He said he must have his gourd rattle and magic feathers brought before he could see clearly. Meanwhile the husband had brought in a fourth medicine-man. Number four then smoked a cigarette and pro-

[a] "Small rock crystals, supposed to be produced by the shamans, are thought to be dead or even living—a kind of astral bodies of the Theosophists. Such a rock crystal is called tevali (plural tevali'r) or 'grandfather'—the same name as is given to the majority of the gods. But it may, however, represent any person or relative, in accordance with the directions of the shaman." Lumholtz, Symbolism of the Huichol Indians, 63.

nounced the verdict of death. Poor Sala had been compelled to lie quiet to avoid the torture from the "pins" but her mind was active and she understood every word that was said in her presence. Determined to do what they could, the last two arrivals set to work singing. Number three sang four songs, followed by four more songs from number four. Then number three sang four more, and so they alternated all night. Toward morning they put ashes into a cup of water, sweeping eagle feathers across the dish meanwhile. They then announced that they would get the evil out soon. Number four sprayed water from his mouth over the patient and declared that he had found her to be suffering from the presence of the horn of a horned toad in her heart. Falling on his knees beside her he sucked with all his might until he had removed the offending object. As it flew into his mouth it gagged him and he hastened to withdraw it. Calling for a piece of cotton he put the hot and burning horn into it and told the brother of the patient to throw it into the river. Then the two Si'atcokam sang twice and later in the day sang twice through their set of four songs for the horned toad. This faithful treatment brought about a recovery.

Sala's brother fell ill of some throat disease over which the doctors sang, sucked, and smoked for a month before he died.

It will be seen from the cases described that the songs play an important part in the treatment, and they are sung with endless repetitions. After the cause of the affliction has been decided upon the songs of that animal or object are sung. An image or a part of the animal or object is pressed upon or waved over the part affected and then the farce of sucking out the evil is gone through. Juan Thomas informed the writer that he had frequently concealed under his thumb nail the objects which he pretended to suck from his patients.

Sometimes ashes are rubbed upon the skin of the sick person. No matter what the disease may be, the ashes are administered with light rubbing. No explanation could be given for this treatment. For any disease, also, pledgets of cotton might be burned on the skin, and as these were half an inch in diameter and two or three might be burned in one place, the effect must have been very painful.

The female Si'atcokam never treated children; they confined their labors to the treatment of abdominal troubles not necessarily peculiar to sex. They treated men for abdominal difficulties and men treated women for all diseases.

Payment is promised to the Si'atcokam when they are called in. It may be a horse, cow, some wheat, a basket, or similar property. If he contracts to sing three nights and to receive a horse in payment, he will not receive the horse if the patient dies after he has sung two

nights, but will receive some compensation. The death of the patient does not annul the obligation under any circumstances.

In addition to the animals, birds, and reptiles that cause disease, the variety of human ailments and the fertility of the native's imagination necessitated the invention of yet other causes. These were sometimes superhuman, but only too often the tribe merely descended to the level of the African savage, and accused some medicine-man of the crime of causing disease. There would seem to be some reason in this if the medicine-man who had the case in hand were the one accused, but that was not the custom; it was a rival practitioner who bore the onus and frequently paid the penalty with his life, as may be seen from the accompanying annals. It would seem that every epidemic of any extent that ever afflicted the Pimas caused an almost wholesale destruction of medicine-men. In individual cases of malice on the part of the medicine-man the treatment is to sing the medicine song and afterwards to place four magic stones in a cup of water, taking out one at a time and holding it under the nose of the patient, that he may inhale its power; then he must drink the water.

If a person believes that a medicine-man has brought sickness upon his household he calls in another doctor to find the charm. The one consulted takes four assistants and searches day and night until some object is found which they can safely assume was hidden in the vicinity by the malicious medicine-man. When found the object must not be touched, for fear of death, but the mere discovery renders it harmless to the person against whom it was aimed.

Sometimes the medicine-man causes sickness by "shooting" charcoal, made from the burned body of an enemy, into some one who does not notice it at the time, but whose body burns in consequence. If it is sucked out before it is entirely consumed the charcoal loses its power and the patient recovers.

The badger causes a severe throat disease, which, however, is considered to be of rare occurrence. The remedy is to sing the badger song (p. 321) and to press the tail of the badger on the patient's neck.

The bear causes swellings upon the body, headache, and fever. The remedy is to sing the bear songs, of which there are several (p. 318); the singing is sometimes continued throughout the entire day. No part of the animal is used in the treatment. The bear is friendly to the Pimas. If a man meets one he must say, "I'm red," and then the bear will not touch him, though he is free to kill the animal.

The black-tailed deer causes diseases of the throat and lungs. The remedy is to sing the deer song (p. 317) and to press the tail of the deer on the affected part.

The coyote causes sickness in children; some believing that he brings on the dysentery when the mother eats melons before the birth of the child, others thinking that he causes rash and blisters on the baby's tongue. The remedy is to sing the coyote song (p. 316) and swing the tail of the coyote over the child.

The dog, a very near relative of the coyote in Pimería, also causes trouble for the children. When a child a month or two old is fretful and sleepless the medicine-man is pretty certain to diagnose the case as "dog disease." He does not treat it in any manner, but some one who knows the dog song (p. 315) is called in to sing, and as he sings he sways a stick that has some of a dog's vibrissæ tied to it, to and fro over the child.

The gopher causes stomach trouble, particularly in children. The remedy is to sing the gopher song (p. 319) and to press moistened earth from a gopher hill upon the affected part. At Gila Crossing were obtained two small deerskin bags containing tufts of eagle's down and two or three twigs that had been cut by a gopher. These were to be pressed upon the stomach of the child.

The jack rabbit causes open sores. The remedy is to sing the rabbit song (p. 314), and during the singing to swing over the patient the tail of the hare to which the animal's vibrissæ have been tied.

The mouse, kuwakawâpâkam, causes constipation in children. This is cured by singing the mouse song (p. 314), and pressing the tail of the mouse on the abdomen. If no prepared tail is available a dead mouse is used.

The ground squirrel of the mesas causes nosebleed.

There are but four birds that cause disease. There appears to have been no conscious classification in the minds of the Pimas in attributing certain afflictions to the birds. These diseases are all of a different nature, and are similar to those assigned to mammals and reptiles.

The eagle causes hemorrhage. The remedy is to sing the eagle song (p. 289) and to pass the down of the eagle over the part.

The eagle is also blamed for the lice that find refuge in the hair of the Pimas. The remedy is to blow cigarette smoke over the head.

The hawk causes hemorrhage in grown persons only. The disease is cured by singing the hawk song and passing the wing feathers of the bird over the patient. If one touches a hawk he must be secluded for four days.

The owl throws people into trances and fits. They are restored by having the owl song (p. 311) sung while six owl feathers mounted on a stick are swung over them. The cry of the small owl, kokovol(t), in the night is a bad sign. When the large owl utters a sound resembling human speech sickness may be expected.

The vulture or turkey buzzard causes sores, especially syphilis, and sore eyes on the baby if the parent eat a dead animal just before the

child is born. The remedy is to sing the buzzard song and pass the wing feathers of the buzzard over the child.

A Gila monster if killed by the father just before the birth of a child causes the baby's body to become red and feverish. The remedy is to sing the Gila monster song (p. 307). Such a disease must be of rare occurrence and no other treatment is prescribed.

The horned toad causes rheumatism and hunchback. The remedy is to sing the horned toad song (p. 307), and press an image of the creature upon the patient (fig. 25, *a*). If one accidentally steps on a horned toad he must tie a red string around its neck and let it go, saying, "nyu u-ut hok," my blood eat. This is to cause the subtle toad to eat the bad blood that may cause disease in the person.

The large lizard, tcosokalt, is responsible for a fever in children, the most prominent symptom of which is the whitening of the skin. If any one who knows the lizard song (p. 308) is available he comes and presses an image of a lizard (fig. 25, *b*) on the child as he sings; if not, a lizard is killed and fat from its body is rubbed upon the child.

The rattlesnake causes kidney and stomach troubles in children. These are cured by singing the rattlesnake song (p. 309) and pressing the parts affected with an image in wood or stone of the rattlesnake.

The bite of the rattlesnake is cured by sucking the wound every morning for four days. Others suck it one or two days, and also ligature the limb with horsehair, or draw a circle around it with charcoal to define the limit of the swelling. The Papagos and Mexicans use the plant Euphorbia marginata to poultice snake bites, and it is possible that some Pimas use it also, though the writer was unable to find anyone who knew of its being so used.

While the rattlesnake is dreaded and under circumstances previously mentioned is regarded as possessing magic power, he occupies a far less important place in Pima thought than in that of the Hopis. It is said to be unlucky to come upon two rattlesnakes, one soon after the other, when engaged in searching for anything. If a child puts its foot through an olla head ring that is commonly left lying about the premises, the mother warns him that the rattlesnake will bite him. The same fate is threatened if he puts his foot into the mortar in which the mesquite beans and other articles of food are ground. The rattlesnake is accredited with wisdom that directs it to the place where the best mesquite beans are to be had, though why such a locality has any attractions for it was not explained.

The turtle causes large sores on the body or cripples the legs. The treatment is to sing the turtle song (p. 306) and shake a rattle over the patient. The rattle is made by killing a river turtle and placing the body in an ant-hill until the ants have thoroughly cleaned out the shell, which is then mounted on a handle, and some gravel put into it.

A butterfly with striped wings causes internal pains. The treatment consists in singing the butterfly song (p. 295) and pressing the body of the patient with four or five images of the butterfly cut from deerskin.

The worm, kămmâlt, when found dead and dried is ground up in the mortar and the powder used to cure sores around the baby's mouth.

One's teeth will fall out if he eats food over which some caterpillars have crawled.

The nausea of pregnancy is caused by unfaithfulness on the part of the woman. It is cured by singing the proper songs and striking two sticks a foot long over the patient afterwards.

The remolinos, or whirlwinds, that are so common in Pimería, cause pains in the legs, but not swellings. The remedy is to sing the wind song (p. 324) and to rub the limbs with the black gum of the okatilla, Fouquiera splendens.

The sun may cause disease for which there would seem to be no special song. However, a small colored image of the sun with feather rays attached is used by the medicine-man.

A captured Apache child might cause lameness in some member of the family by whom he was kept. It was cured by some one who had killed an Apache singing over the patient. Then the child must be sold to the Mexicans or Americans. It was also supposed that the touch of an Apache woman might cause paralysis.

Piholt was once a man, but is now an evil spirit living in the east, and causing a disease which has its songs.

The Nyavolt, an evil spirit, may induce a horse to throw his rider and injure him. The patient is cured by singing the Nyavolt song (p. 329) and swinging a pair of crossed sticks over the injured part.

A certain disease of the throat is called wheita, and the same name is given to a stick made from mesquite root, which is thrust down the patient's throat four times and then passed four times over the heart to cure him.

Tcunyĭm is an evil spirit that causes sickness in children. The most characteristic symptom is fretfulness. The Tcunyĭm song is sung and the child's body is pressed with a strand of hair taken in war from an Apache's head. The hair is cleaned and washed by some old person, then the ends are glued together with the gum of the creosote bush before it is ready to use. Â'mĭna sticks tied with bluebird and redbird feathers are also used.

Kâ'mâl tkâk (pl. XLIV, *b*), who was accustomed to assist the doctors, states that this name is applied to a disease of the throat which causes the victim to lose flesh. The treatment consists in placing â'mĭna in an olla of water to soak while the doctor or his assistant blows through a tube, called the tcunyĭm cigarette, upon

the forehead, chin, breast, and stomach of the patient. The tube has a bunch of feathers attached called a-an kiatûta, and these are next swept in quick passes downward over the body. The â'mĭna are then taken and sucked four times by the patient, after which the end of the bundle is pressed against the patient's body, then laid flat upon his breast and rubbed. Finally, the assistant repeats the speech of SIU-U at the time when that deity restored himself to life, at the same time making passes toward the patient.

Magic influence exerted by evilly disposed persons, especially medicine-men, may cause a particular ailment, called "doctor's disease," in the cure of which the slate tablets found in the ruins are believed to be most efficacious. The information was given that no marking was made on the slates; they were simply placed in a vessel of water and the patient drank the water.

Sometimes the sickness of a child was believed to be due to the fact that some person desired to take it away from its parents. If they went to the covetous one and accused him of the crime the child immediately recovered.

Navitco (fig. 26) is an evil spirit adopted from the Papagos. His home is in the mountain called Papak, Frog.[a] This spirit causes the knees to swell and the eyes to become inflamed. It may safely be inferred that this disease has been a common one, as it is the practice to treat several at one time in a somewhat more elaborate ceremonial than is usual in the treatment of other diseases. One medicine-man personates Navitco, another known as Kâkspakam accompanies him; both are masked. At a signal from Navitco, given by throwing corn meal on the baskets, 15 or 20 persons appointed for the purpose sing the Navitco song (p. 326), accompanied by the notched sticks, after which Navitco goes to each patient and pats him with eagle feathers until he has presumably drawn out all disease. He then throws away the feathers. He is followed by Kâkspakam, who seats himself before each patient to give him an opportunity to touch the mask and then the swollen knees. When the singers have finished, they rub the notched sticks over their own bodies to prevent contagion. All concerned in the ceremony must not eat salt for four days thereafter.

The Navitco medicine-men also claim to possess the power to bring rain.

The treatment of a child afflicted with dysentery mingles the new order with the old in an interesting manner, combining Christian baptism with pagan sun worship and magic medical practice.

A man and his wife who are close friends of the parents come early in the morning and wash the baby. If it is a boy, it is taken up at sun-

[a] Santa Catalinas, north of Tucson; altitude, 10,000 feet.

rise by the man, who breathes upon a cross and holds it toward the sun four times. If it is a girl, it is taken by the woman, who breathes upon a medal and holds the object toward the sun four times. Whichever object is used is next passed in the form of the cross over the face and again over the body of the infant by both the man and the woman. Each then holds the child four times in his or her arms before handing it to the parents. A name is given the child by the godfather and godmother. No child except one thus ill or another in the same family of a naming age at the time is ever christened thus. The godparents must give the child some wheat or corn each year until it grows up, and the parents give a basket each year in return.

Even horses may become sick through the evil influence of malicious medicine-men, who, it is said, "shoot" live coals into them—coals that have been taken from an Apache fire. The remedy is of a similar magic character. A reputable medicine-man is called in, who diagnoses the case and decides from what direction the coal was "shot." He does not sing, but after smoking a cigarette and blowing puffs of smoke about the premises and upon the horse he determines the place to suck out the coal from the distressed animal. When he gets the coal into his mouth he makes a pretense of being burned by it and immediately fills his mouth with water, after which he casts out the coal.

The transparent trick of sucking a hair from the body is resorted to in veterinary practice in a manner similar to that pursued when treating human ailments.

Prevalent Diseases[a]

Consumption is the most frequent and fatal disease, due to poverty of diet and contagion. The Pimas do not attempt to prevent infection. Their former treatment was a diet of mountain turtle and sun-dried beef.

Dysentery is common in summer because of the peculiar habit, by no means confined to the Pimas, of eating unripe melons.

Impetigo contagiosa is the worst skin disease, and is principally confined to the children.

Children are intentionally exposed to smallpox and measles, that they may have the diseases in lighter form. Smallpox was regarded as an evil spirit of which they did not dare to show fear. They said "I like Smallpox," thinking that he would be thus placated. At one time they attempted inoculation from persons that had light attacks, but the experiment resulted in many deaths. From 1870 until the Government sent a physician to the agency, the missionary, Rev. C. H.

[a] From 1892 until 1895 Dr A. E. Marden held the position of agency physician at Sacaton and from 1900 until the time of the writer's visit to the Pimas in 1902 continued his practice as missionary physician among the Pimas. The writer is indebted to him for the greater portion of the information relating to the degree of prevalence of disease.

Cook, supplied the Pimas with vaccine. They retained some of their old dread of the demon and continued to place the bandages with which the arm had been dressed upon a certain mesquite tree, not daring to burn them for fear of offending. Smallpox has usually been brought to the Pimas by the Papagos from Mexico. Measles appears every three or four years, but does not seem to be any more fatal than among the whites, though it is more likely to be followed by consumption.

Rheumatism of the chronic articular type is fairly common and is treated like many other pains by scarifying the part affected with bits of broken glass.

There are a few cases of acquired syphilis among the Pimas and a few due to hereditary taint, but they are fairly free from the disease, considering their habits, and are much more exempt from it than their allies, the Maricopas.

Diarrhea was supposed to be due to touching ripe wheat in the fields, and it was considered necessary for a medicine-man to walk about in the standing grain and blow the danger away with smoke.

Bleeding wounds were bandaged; burns were plastered with wet mud; broken limbs were set with skill and inclosed in light and strong splints made of reeds.

Melancholia sometimes afflicts "a man who has killed Apaches" so that he wanders about without clothing and refuses to talk. No treatment is attempted, and the victim dies of neglect.

Massage is a common form of treatment of almost any disease and of itself is enough to endanger the patient, for it sometimes happens that the operator administers a vigorous pommeling to the abdomen.

Table of diseases

Rare	Occasional	Common
Acne	Asthma	Bronchitis
Epilepsy	Cataract	Caries
Dementia	Eczema	Conjunctivitis
Lupus	Favus	Consumption
Melancholia	Heart disease	Diarrhea
Typhoid	Neuralgia	Dysentery
	Pleurisy	Impetigo contagiosa
	Scabies	Measles
	Smallpox	Pneumonia
	Syphilis	Rheumatism
	Urticaria	Toothache

LINGUISTICS

VOCABULARIES

There are four short vocabularies of the Pima language in manuscript in the possession of the Bureau of American Ethnology:

	Words
Dr C. C. Parry, under orders of Maj. W. H. Emory, 1852	154
Ammi M. White, Pima trader at Casa Blanca	191
John D. Walker, Company I, Fifth Infantry Colored Volunteers, Tucson	197
F. W. Hodge, In Cushing's party on Salt river, 1887	53

The first is published in Schoolcraft, volume III, page 461, and forms the basis of the English-Pima vocabulary published in Die Pima-Sprache by Buschmann in 1857 (p. 367). Doctor Parry employed a Maricopa interpreter. Buschmann's vocabulary also includes words obtained by Doctor Coulter, which were published by Gallatin in Transactions of the American Ethnological Society, volume II, page 129, and by Scouler in the Journal of the Royal Geographical Society of London, volume XI, page 248. Buschmann further drew from Pfefferkorn's Beschreibung der Landschaft Sonora, volume II, passim; three words from Mühlenfordt's Schilderung der Republik Mejico, volume II, page 225; and words from the Lord's Prayer in Pima as given by Hervas in Saggio Practico Delle Lingue (p. 124–125). There are 182 words, in all, in Buschmann's list. Fewer than half the 53 pages of his paper are devoted to the language of the Pimas.

Lieutenant Whipple obtained a vocabulary of 67 Pima words, which was published in his Report upon the Indian Tribes, Pacific Railroad Reports, volume III (pt. III, p. 94).

In the Journal of the Royal Geographical Society for 1841, page 248, there is a Pima vocabulary of 38 words that was collected by a Doctor Coulter; where, it is not stated. The orthography is not explained.

In his Opuscula, page 351, R. G. Latham has published a vocabulary of 27 words, stating neither from whom it was derived nor where it was written. In his Natural History of the Varieties of Man, Latham devotes three pages to quotations from Lieutenant Emory descriptive of the "Pimos."

As examples of the orthography and extent of these vocabularies, two are republished below.

Vocabularies

English	Coulter	Latham	English	Coulter	Latham
Man	tiuot	huth	Salt	ōnă	
Woman	ūbă	hahri	Light	tai	
Indian		huup	Day	tashimĕt	
Boy	āndī		Night	stuükum	
Chief	capit		Cold	scapit	
Father	niook		Hot	stōn	
Mother	intui		Stone	jōtē	
Body	nionh		Mountain	tóàk	
Head	nemŏh	mouk	White	stoxa	
Hair		ptmuk	House	nihki	
Ear	nāānk	ptnahauk	Door	pūālīt	
Nose		tahnk	Bow	ñikāt	
Mouth		chinits	Arrow	napot	
Tongue		neuen	I		ahan
Tooth		ptahan	He		yeutah
Beard		chinyo	One		yumako
Hand	noh	mahahtk	Two		kuak
Foot		tetaght	Three		vaik
Heart	īpŏtŭk		Four		kiik
Sky		ptchuwik	Five		puitas
Sun	tash	tahs	Nine	humukt	
Moon	maskat	mahsa	Ten	huistemām	
Star		non	Eleven	māātŏ	
Snow		chiah	Twelve	kóóhk	
Fire		tahi	Brave	tiout	
Water	shōñtik	suntik	Bad	mūmkō	
Sea	kakatchck		Good	skukit	
River	ākĕmŭli		Great	vŏhŏvākuitch	
Lake	vō				

Songs

CLASSIFICATION

During a stay of seven months among the Pimas not a single native song was ever heard from a man, woman, or child. This is in striking contrast with the writer's experience among most other tribes that have not been longer in contact with the whites. Not half a dozen individuals can be found in the upper villages who know any considerable number of the old songs. And yet the number of these songs is very great and most of them are by no means unpleasing even to a Caucasian ear. The songs are in series that are known to different individuals. Thus, the songs sung at the puberty dances are in series that are started by the first singer to arrive upon the scene in the evening. If another singer arrives first during the next evening the series of songs for the night is changed; though all belong to the general class of "menstrual songs." Sometimes a festival is inaugurated

because of the accidental presence of some one who knows a group, as the "Bluebird songs" or the "Swallow songs." Examples of all the principal groups of songs are here recorded. They include:

Archaic songs; included in the cosmogonical myth; they are known as "Emergence songs," and contain a few words of a meaning unknown, owing either to age or to borrowing.

Festal songs; including "Circling," "Basket beating," "Middle run," "Name," etc.

Game songs; these are short, not numerous, and often borrowed.

Hunting songs; there are a few songs that appear to have once been used in the ceremonial preparations for hunting, but which are now employed in the magical treatment of disease.

Medicine songs; this is the largest class; every conceivable ailment has its appointed song, ascribed to some animal or natural phenomenon or even supernatural agency. Many of these are from the Papagos.

Puberty songs; some are especially for this ceremony, though any festal songs may be sung at this time.

Rain songs; these contain interesting references to deities not elsewhere mentioned. So far as known, their source has not yet been ascertained.

War songs; these were numerous and of great importance in the ceremonies.

ARCHAIC SONGS

[Told by Kâ'mâl tkâk, Thin Leather]

Creation Songs by Earth Doctor

THE CREATION OF THE EARTH

I

Tcuwutu Makai tcuwutu natâ miakukâ nyuĭta hasĭtco-onyĭ!
Earth Magician, earth make come, see what you intend!
(Repeat)

*Sikâlamû natâ miakukâ nyuĭta hasĭtco-onyĭ! (D. C. to *)
Round make come, see what you intend!

† Tcuwutu Makai tâʌakû natâ miakukâ, nyuĭta hasiyaña!
Earth Magician mountain make come, see what you tell!

Tapĭnyĭmû natâ miakukâ, nyuĭta hasiyaña! (D. C. to †)
Smooth make come, see what you tell!

II

Tcuwutu Makai tcuwutu natâ; Tcuwutu Makai tcuwutu natâ, himlo,
Earth Doctor earth make; Earth Magician earth make, going,
himlo, himlo, himutco-o. (Repeat)
going, going, going (causal).

*Tcuwutu Makai tâv'a ku natâ; Tcuwutu Makai tâvakû
Earth Doctor mountain kind of make; Earth Doctor mountain
natâ, himlo, himlo, himlo, himutco-o. (D. C. to *)
make, going, going, going, going.

III

Tcuwutu tapa sihaitconyoka-ana:
Earth open magician
Tâvañgû tapa sitco mamatcu-u.
Mountain open magic powers knows.

Translation

Earth Magician shapes this world.
  Behold what he can do!
Round and smooth he molds it.
  Behold what he can do!
Earth Magician makes the mountains.
  Heed what he has to say!
He it is that makes the mesas.
  Heed what he has to say.
Earth Magician shapes this world;
  Earth Magician makes its mountains;
Makes all larger, larger, larger.
  Into the earth the Magician glances;
Into its mountains he may see.

IV

THE CREATION OF THE SUN

Vanyĭñgi Tarsaiwu natâkahĭ; vanyĭñgi Tarsai natâkahĭ, hiyanyi
I am Sun made; I am Sun made; here me
tamai ya-ahai punanaitco-o. (Repeat)
above both directions throw.
*Si-ĭyaldĭ takĭo wopahimû kahowu taitcunyukû sapâva mununa-a.
East direction throw there rise running right running back.
(D. C. to *)

Translation

I have made the Sun!
I have made the Sun!
Hurling it high
In the four directions.
To the East I threw it
To run its appointed course.

V

THE CREATION OF THE MOON

Vanyĭñgi Marsatû natâkahĭ; vanyĭñgi Marsatû natâkahĭ; hiyanyi
I am Moon make; I am Moon make; here me
tamai ya-ahai punanaitco-o. (Repeat)
above both directions throw.
*Si-ĭyaldĭ takĭŏ wopahimu kahowa tcursanyuku sapâva himuna-a.
East direction throw there came up correct come.
(D. C. to *)

Translation

I have made the Moon!
I have made the Moon!
Hurling it high
In the four directions.
To the East I threw it
To run its appointed course.

VI

THE CREATION OF THE STARS

Vanyĭñgi Yo-ohowu natâ; vanyĭñgi Yo-ohowu natâ, tamaiwu nañgĭta
I am Stars make; I am Stars make, above throw
tcuwutu mamasi-i. (Repeat)
earth light.
*Vanyĭñgi wus aitco natâ tamaiwu nañgĭta tcufhutu tânâli-i.
I am all things make above throw land shines.
(D. C. to *)

Translation

I have made the Stars!
I have made the Stars!
Above the earth I threw them.
All things above I've made
And placed them to illumine.

FLOOD SONGS BY EARTH DOCTOR

THE WARNING OF THE FLOOD

Haya, rsâ-âhĭñgu nyhu-umatcita tcomuñgâ wu-uwusi nyuĭnahi-imu;
Weep, pitiable me people you will all see happen;
haya, rsâ-âhĭñgu nyhu-umatcita tcomuñgâ wu-uwusi nyuĭnahi-imu.
weep, pitiable me people you will all see happen.
Kosi'na rso-otaki kosina tcutcuwuʇu vamohai-i. (Repeat)
That water that land dissolve.
*Haya, rsâ-âhiñgu nyha-atconyi tcomuñgâ wu-uwusi mamatcu-u;
Weep, pitiable my relatives you will all learning;
haya, rsâ-âhiñgu nyha-atconyi tcomuñgâ wu-uwusi mamatcu-u.
weep, pitiable my relatives you will all learning.
Kosina rso-otaki kosina tâtâvaku vamohai-i. (Repeat to *)
That water that mountain dissolve.

Translation

Weep my unfortunate people!
All this you will see take place.
Weep my unfortunate people!
For the waters will cover the land.
Weep my unhappy relatives!
You will learn all.
Weep my unhappy relatives!
You will learn all.
The waters will cover the mountains.

THE PEOPLE CLIMBING SUPERSTITION MOUNTAIN

Haiya! haiya! vina, vina, hai-iya! Punha rsâhika tconyihi-i,
Aha! Aha! Flood, flood, Aha! Remember pitiable making.
haiya! haiya! vina, vina, hai-iya! Punha rsâhika tconyihi-i. Hamai
Aha! Aha! Flood, flood, Aha! Remember pitiable making. Here
pa-apaitcomhi nyhu-umatcita rsâhika himuna-a. (Repeat)
before me me people pitiable going.

Translation

Haiya! Haiya! Flood! Flood! Hai-iya!
See the doom awaiting them!
Haiya! Haiya! Flood! Flood! Hai-iya!
Here are my doomed people before me.

FLOOD SONGS BY SOUTH DOCTOR

ON SUPERSTITION MOUNTAIN BEFORE THE FLOOD

Rsonañgi tcuwuɻu vamohai-i; rsonañgi nyuwutu vamohai-i,
Water land dissolve; water land dissolve,
kundañgu makaiva sihaitco-o rsonañgi nanakâ tconyihi-imu.
in magician powerful water experimenting making.
Rsonañgi tâvaku vamohai-i; rsonañgi tâvaku vamohai-i, kundañgu
Water mountain dissolve; water mountain dissolve, in
Nasiavâ sitco-omai-i rsonañgi nanakâ wowoi-hi-mu. (Repeat)
Nasi understand water experimenting toward-going.
Kakânda ku tâtâvañgu ta-atama nanyolĭnaka rso-otaki yomahi-
Crooked kind of mountain top I stay water disperse.
imu. (Repeat)
Ta-atama nayolĭnaka rso-otaki yomahi-imu. (Repeat)
Top I stay water disperse.

Translation

The waters dissolve the land!
The waters dissolve the land!
The mighty magician tests his strength.
The waters dissolve the mountains!
The waters dissolve the mountains!
Nasi foresees what is coming.

On Crooked mountain I am standing,
Trying to disperse the waters.
On Crooked mountain I am standing,
Trying to disperse the waters.

BEFORE THE PEOPLE TURNED TO STONE ON SUPERSTITION MOUNTAIN

Sihaitcohâ! Sihaitcohâ! Nyhânaka wuwuma sihaitcohâ! Wuwuma
Powerless! Powerless! My magic crystal with powerless! With
siamhu nyhâtaitco. (Repeat)
right petrify.

And again he sang before they became petrified:

Translation

Powerless! Powerless!
Powerless is my magic crystal.
Powerless! Powerless!
I shall become as stone.

FLOOD SONGS BY ELDER BROTHER

IN HIS OLLA BEFORE THE FLOOD

I

Tcokoi vavahaki! tcokoi vavahaki! Ku-unɻa nyi yolina. Kuɻa nyi
Black house! black house! In I hold. In I
yolĭnha-a wu-umatci yahai nyimitco-o. (Repeat)
stay with to and fro I go.

Translation

Black house! Black house! Hold me safely in;
Black house! Black house! Hold me safely in,
As I journey to and fro, to and fro.

II

THE FLOOD

Rsotaki mutu-u! rsotaki mutuka! Muɲava putanyû, tamaiʌukatcima
Water running! water running! In sounding, top laying
tcuvaki parsa pa-anyhimitco.
cloud near by on there I borne.
Rsotaki mutu-u! rsotaki mutuka! Muɲava rsarsavai, tamaiʌukatcima
Water running! water running! In roaring, top laying
hononyi parsa pa-anyhimitco. (Repeat)
evening near by on there I borne.

Translation

Running water! Running water! Herein resounding,
As on the clouds I am carried to the sky.
Running water! Running water! Herein roaring,
As on the clouds I am carried to the sky.

III

COMING FROM HIS OLLA AFTER THE FLOOD

Hianyai worsunyu; hianyai worsunyu-u, sihai nyoka hiayai
Here I came out; here I came out, magician here I
worsunyu sihai tcoka-a. Hianyai worsunyu; Hianyai worsunyu-u,
came out magician. Here I came out; Here I came out,
sitco matcu hianyai worsunyu sitco matcu-u.
magical powers here I came out magical powers.
Hianyai worsunyu-u sihai nyoka; hianyai worsunyu sihai tcoka-a.
Here I came out magician; here I came out magician.
Hianyai worsunyu-u sitco matcû hianyai worsunyu sitco matcu-u.
Here I came out magical know here I came out magical know.
(Repeat)

Tânyo wumû; tanyo wuma kukiʌa. Sundai wumû, sundai wumû
Who I with; who I with stand. Who with, who with
tahiwa.
sit.
Itañgu nyo-osihaka wuma kukiwa. Itañgu nyâ-âtahaka wumû
This my cane with stand. This my crystal with
tahiwa. (Repeat)
sit.

Translation

Here I come forth! Here I come forth!
With magic powers I emerge.
Here I come forth! Here I come forth!
With magic powers I emerge.

I stand alone! Alone!
Who will accompany me?
My staff and my crystal
They shall bide with me.

POST-FLOOD SONGS BY ELDER BROTHER

AT THE CENTRAL PART OF THE EARTH

Kaɟu nyutva worsa hikû nyuwundû vanyuina; katu nyutva worsa
There I came navel land I see; there I came
hikû nyuwundû vanyuina. (Repeat)
navel land I see.

* Kaɟu nyutva worsa hikû navañgû vanyuina; katu nyutva worsa
There I came navel mountain I see; there I came
hikû navañgu vanyuina. (Repeat to *)
navel mountain I see.

Translation

Here I have come to the center of the earth;
Here I have come to the center of the earth.
I see the central mountain;
I see the central mountain.

CLIMBING THE CLIFFS TO ATTACK EAGLE

Kand vavai tapĭnymû, kand vavai tapĭnymû. Kand vavai tapĭnymû,
Up steep bank smooth, up steep bank smooth. Up steep bank smooth
kand vavai tapĭnymû. Vâpăt tcotcoa kâĭnatca himuna. (Repeat)
up bank smooth. Points stick after going.

Kand vavai napĭnymû, kand vavai napĭnymû, vâpăt tcotcoa kâĭnatca
Up stone smooth; up stone smooth, points stick after
himuna. (Repeat)
going.

Tanyĭ tâhai I-itâĭ, tanyĭ tâhai I-itâĭ,
I am white Elder Brother, I am white Elder Brother.

Tanyĭ tâhai Litâĭ, tanyĭ tâhai Litâĭ.
I am white Elder Brother, I am white Elder Brother.

Va-asĭf tcotcoa kâĭnaka himuna. (Repeat) (Repeat both lines twice)
Leafless stick after walking.

Translation

Up the cliff, steep and smooth,
Up the cliff, steep and smooth,
Up the cliff, steep and smooth,
Climbs Elder Brother
With his shining power.
Up the cliff, steep and smooth,
Up the cliff, steep and smooth,
He climbs step by step.

ELDER BROTHER AS A FLY

Song sung by Elder Brother as he concealed himself in the form of a fly

Himovali movali moko, himovali movali moko. Hivanytâ sikâsiimo,
(?) fly die, (?) fly die. I will sleep,
hivanytâ sikâsiimo. (Repeat)
I will sleep.
Himovali moko, hivanytâ sikâsiimo, hivanytâ sikâsiimo. (Repeat)
(?) die, I will sleep, I will sleep.
Teinyny.
Buzz-z.

Translation

Himovali! Die fly! Himovali! Die fly!
I shall sleep! I shall sleep!
Himovali! Let die! I am drowsy.
I will sleep! Buzz-z.

Song sung by the Eagle's wife to put him to sleep

Haya yakahai yahai mo, haya yakahai mo, hovanytâ sikâsiimo,
(?) (?) (?) (?) (?) (?) (?), I sleep.
hovanytâ sikâsiimo. Haya yakahai mo, hovanytâ sikâsiimo, hovanytâ
I sleep. (?) (?) (?), I sleep, I
sikâsiimo. (Repeat)
sleep.

Translation

Haya yakahai yahai mo! Haya yakahai mo!
I am sleepy, I am sleepy.
Haya yakahai yahai mo! I am sleepy.

DESTRUCTION OF HÂ-ÂK

As they prepare to destroy the female monster, Hâ-âk, Elder Brother and the people sing together

I

Tâ-ânuânâma Lıtâï hnwuli voponak nyuhûna. Amunyutâ
Dazzling power Elder Brother winds tie singing. Then sing
mulivak wu-umany voponak nyu-uhûna'.
came swiftly together tie, singing.

II

Kovakovв, kovakovв, kovakovв, kovakovв. Iyali Moahanañ-
(?) (?) (?) (?) Great Mo'hatûk[a]
inamnyu-una. Kovakovв, kovakovв.
top singing. (?) (?)

Translation

Dazzling power has Elder Brother,
Mastering the winds with song.
Swiftly now we come together,
Singing to secure control.

Kovakovв, kovakovв,
Kovakovв, kovakovв.
Singing on the summit
Of great Mo'hatûk mountain.

[a] Mo'hatûk, Greasy mountain, between the Gila and Salt rivers near their confluence. It is supposed to be the home of Elder Brother.

III

Anayokûna, anayokûna, hayokûna. Tcu-unarsat',[a] yâvatcukĭ;
(?) (?) (?) (?) cigarette:
kâsinakon yâvatcuki. Anayokûna, anayokûna, hayokûna.
sleep-inducing cigarette. (?) (?) (?)

IV

Ala wus mo'-omok tâtâvaka tci'pia mi'ak âvaɟiaña mi'ak ât'cupaña.
This all sharps mountains moving near their well near having mortar

V

Vaɟ wutama vopahimû. Vaɟ wutama vopahimû. Vaɟ wutama
Steep bank on throw. (Repeat)
vopahimû.
Tcutcunoñi ko'kovoli sis'vûnûka-a. Vaɟ wutama vopahimû.
Blue (or green) owl having brightest. Steep bank under throw.
Vaɟ wutama vopahimû.
(Repeat)

Translation

Anayokûna, anayokûna, hayokûna.
Sacred pipe of Tcu-unarsat',
Sleep-inducing sacred pipe.
Anayokûna, anayokûna, hayokûna.

Hâ-âk flees from her pursuers.
But her spring and mortar stay.
Throw a great stone!
Throw a great stone!

The blue owl is brightest,
Throw a great stone!
The blue owl is brightest.
Throw a great stone.

Songs sung by Elder Brother and his followers in the Nether World

IN THE NETHER WORLD

I

Vatcikĭa himu; vatcikia himu; vatcikia himu; vatcikia himu.
We go; we go; we go; we go.
Huk âsinyu apu ka'na. Hita tuvavakĭ ahiya wunañitâ. Vatcikĭa
That me pleases (?). This home here we leave. we
himu; vatcikĭa himu; huk âsinyu apu ka'na.
go; we go; that me pleases (?)

Translation

We go, we go, we go, we go,
Happy we leave our homes.
We go happily we go.

---

[a] Tcu-unarsat' is the name of a former Pueblo chief who lived near Mo'hatûk mountain.

II

Vatci'ki mutdu; vatciki mutdu. Vatciki mutdu; vatciki mutdu.
We run; we run. We run; we run.
Vatciki munu; vatciki munu. Hukâsinyâmu kana. Hita tuyâitaka
We run; we run. That me pleases (?). This our country
hiya. Vavoyŏk vatciki munu. Hukâsinyâmu kana.
here. To leave we hasten. That me pleases (?).

Translation

We run, we run, we run, we run.
Happy we leave our land;
With pleasure hence we hasten.

ON EMERGENCE FROM THE NETHER WORLD

On their emergence upon the surface of the earth the Nether-world people danced together and with Elder Brother sang the following:

Itâvany nyi rsavikŭt dawuwum aworsanyu. (D. C.)
We thing our rattle with together.
Inu yatdâ mumai gĭñgĭñ vâikŭ.
This parrot tails waving (?).

Itâvany nyi nyñnyĭrsa awuwum anyopinyu. (D. C.)
We thing our (?) with we went down.
Ĭn a yoku mamai iyĭñyĭñ vâikû.
This (?) tails waving (?).

Kusi tâhai tcutcuwuta(r) tamai tcitciviaka nyuhunatci.
Kind of white countries on come singing.
Vâpânama huwutda-a. Kotca wus tcitciviaka. (D. C.)
Head-dresses moving. We all come.
Nyuhunatci tconanyuka tcutcuwutda tcunâ nyu-u-u.
Singing dancing lands shakes (?)

Kusi tcokwe tâtâvaku tamait' a-ahuka nyuhunatci sisivâta
Kind of black mountains on all come singing head-dresses
moñuva-a
waving.
Kotca wus sita-ahuka; kotca wus sita-ahuta.
We all cherished; we all cherished.
Nyuhunatci, tconayuka, tâtâvaku kâvânyu-u.
Singing, dancing, mountains rumbling.

Translation

Together we emerge with our rattles;
Together we emerge with our rattles,
Bright-hued feathers in our head-dresses.
With our nyñnyĭrsa we went down;
With our nyñnyĭrsa we went down,
Wearing Yoku feathers in our head-dresses.
This is the white land; we arrive singing,
Head-dresses waving in the breeze.
We have come! We have come!
The land trembles with our dancing and singing.
On these black mountains all are singing,
Head-dresses waving, head-dresses waving.
We all rejoice! We all rejoice!
Singing, dancing, the mountains trembling.

Songs of Elder Brother and his underworld supporters as they approached Casa Grande

I

Kan(d)ukai moki va-aki kU-Uka amâ va-aki ta-amai sivany
Yonder dead habitation standing. There habitation at that place he runs
mUmUda-a', Sâ-âhamU maopanû kama iko-osi-i-i.[a]
about, Yellow hands having fabric.

Translation

Yonder stands the doomed habitation.
About the pueblo runs its frightened chieftain
In yellow garment with hand print decoration.

ON APPROACHING PUEBLOS

As the underworld people approached Santan

Pipinû havavahaki kUtda hamo-olina, pipinû havavahaki.
Mud their house in they stay, mud their house.
KUtda maka hitcU, kotdena sinyU-Upuitâka kUtda ahamo-olina.
In one having power see, he was me afraid in they stay.
PipinU havavahaki kUtda maka hitcU.
Mud their house in one having power see.

Translation

In their house of adobe they are staying;
Their chief with magic power fears me.
In their house of adobe we see their chief.

As they approached the village below Santan

AmUkâ vU-Uhânyui-ita; amUkâ vU-Uhânyuita-a; hamânyui-i-i'.
Some will truly see; some will truly see; some will see.
KUhiyU hUkiva mU-Ulihâku rsâ-ânUka pUva-aki nyui-i'.
That old okatilla fence their house see.

Translation

Some will truly see,
Some will truly see,
Will see their house
Behind the okatilla stockade.

As they approached Sweetwater

KatdU kanyUvU-Untdai sikâmUmâli; katdU katcUvU-Utdai
There land plenty beads; there earth
sikâmUmâli. KU-U nanyUtâ-â wo-orsai-i'. (Repeat from beginning)
plenty beads. The place somebody come out.

Hamiva yUna-a nUtâ-â-i' wo-orsai-i' kU nyi-inuita-a KUtânâli-i.
There place somebody came out his soul shines.
(Repeat)

Translation

There is the land of many beads,
There is the land of many beads.
Some one comes forth;
He knows what will befall him.

---

[a] Iko-osi-i-i' is for iks, meaning almost any textile fabric.

As they approached Casa Blanca

Kuisi kavuhuka; kuisi kawuhuku, vavahaki kutda makahi
Very difficult; very difficult, house there magic power
tcu-u'.
see.

Translation

It will be difficult,
It will be difficult,
To capture this pueblo
With its magic power.

As they approached Vulture's home

Hava'nyĭ yali nyanga, Hava'nyĭ yali nya-aka, tânâlikû nanavai-i.
Raven child saying, Raven child me call, brightness glitter.
(D. C.)
*Hiyanyi yamukâ nyuita tânâlikû konyonyoĭ. (D. C. to *)
Here me there see brightness mirage.

Above Gila Crossing

Nanyiki va-aho mukai hiyanyĭ worsanyuk himuna Tcunarsan
I am ? magician here me arose went Tcunasat
yâvatcukĭ yoahana hukatcĭ nâmaiina siamu kokomaiʌoaki-i.
cigarette holding with my enemy correct incantation.
Nanyiki vi-ikiho mukai hiyanyi worsanyuk himuna kâsikun
I am soft feather magician here me arose went sedative
yâvatcukĭ yoahana hukatcĭ nâmaiina siâmû kâkanasi-i.
cigarette holding with my enemy right make sleep.
Hiyanyi worsanyuk himuna Tcunarsan vâvatcukĭ yoahana
Here me arose went Tcunasat cigarette holding
hukatcĭ nâmaiina siâmu kokomaiʌoaki-i. Hiyanyi worsanyuk himuna
with my enemy correct incantation. Here me arose went
kasikŭn âvwatcukĭ yoahana hukatcĭ namaiina siâmu kâkâ-âsi-i.
sedative cigarette holding with my enemy correct make sleep.

At Mesa

Halisi tcu-unâki pahaka pahivwoa. Halisi tcu-unâki pahañgu
Small blue eagle puts tail on. Small blue eagle
pahivwoa tcuvwuna s-utpava worsanu-u. (D. C.)
put tail on land middle came out.
Hiyanyi paiitcomi yahaiiʌa kukivwa tâvanyi yosiañga hukio
Here me before me to and fro stand it was my cane already
simamatcu-u.
know.

Between Tempe and Phoenix

Hamukâ vanyuitahimu hamanyu tâtahivwoaka nyuitahimu
Some will you look for there me sit you look for
hamuka nyuinahi. (D. C.)
you will you look for.
Rsâhiku nâpahui tunâtaku-u hamuka pumuihi-i.
Pitiable enemy crazy you will take.
Rsâhiku nâpahui tunavamo-o hamuka pumuihi-i.
Pitiable enemy drunken you will take.

FESTAL SONGS

Ω-ΩLA VÂPÂĬ NYΩĬ, MIDDLE RUN SONG

[By Ki-iwa, Bitten]

I

Makai kik(i) nyUitcota. *Makai kik(i) nyUitcota itany tânUlikany
Magician houses singing to. Magician houses singing to this my shining
rsUrsU[tcotcoa kony am nyUi tco. (Repeat. Then repeat twice
my straight stand I there singing to.
from *)

II

TcUtcUpavfi yohovfi wUpUñgU vâĭfimna; *tcUtcUpavfi yohovfi
Prostitute women first came running; prostitute women
wUpUñgU vâĭfimûna, tcUtcUtâñgĭ yiâsiñga yokatc. Vâĭfimûna
first came running, blue flowers holding. Came running,
siyaliñgU tatañgĭo vavanyiñañgi tconyopitci nyUnyâkimU. (Repeat
east direction filing slow talking.
stanza; then repeat twice from *)

(At the beginning of this stanza the appointed singers appear in two files, men and women apart)

III

Vanyĭñgi nyonyU[a himUhUna; *vanyĭñgi nyonyU[a himUhUna
I am crooked going; I am crooked going
honUnyñgU. ΛUhUΛUiva himUkaĭ kikiyânû kahatc mañgUvak
west. Toward going to rainbows with swing the arms
gamonya himUhUna. (Repeat same as above)
there I going.

Translation

Singing to the gods in supplication;
Singing to the gods in supplication,
Thus my magic power is uplifted.
My power is uplifted as I sing.

Prostitutes hither running come;
Prostitutes hither running come,
Holding blue flowers as they run.
Talking in whispers they file along.

Along the crooked trail I'm going,
Along the crooked trail going west.
To the land of rainbows I'm going,
Swinging my arms as I journey on.

IV

Tânânâma sialĭk varsatca imuna; * tânânâma sialĭk varsatca imukuk
Shining morning up there come; shining morning up there come
nyaihimuna yoipikot. Aimuna marsata imuna tarsaiʌa tcursatcimu
me reaching pleiades. Come moon come sun appear
sisiʌą̂ yovaya puihimuna. (Repeat stanza; then repeat twice from *)
rises high lifting.

V

Huvatcondu vâĭfimuna * momoi yohofi; vâĭfimuna tcuvañgi mâmâtâk;
Bluebird came running many women; came running clouds heads carrying;
vâĭfimuna wusat mâmunama tcuʌahañgi yongunyi nak vat vâñgu
came running all there top of heads clouds shaking it that shaking
nyihina-a. (Repeat as above)
us.

VI

Ajiwus kâmañgi tâkunad makai * tarsai; wopondak marsat yalihimuna
Kind of gray spider magician sun; tie moon roll
hamukai kukiwoak yopam hyaimûkam. ŋnyuina tcunâñgi tciâĭkond
there stand turn go. See green cane
katc yovaya puihimuna-a. (Repeat as above)
with raising higher.

Translation

The bright dawn appears in the heavens;
The bright dawn appears in the heavens,
And the paling pleiades grow dim.
The moon is lost in the rising sun.

With the women Bluebird came running;
With the women Bluebird came running;
All came carrying clouds on their heads,
And these were seen shaking as they danced.

See there the Gray Spider magician;
See there the Gray Spider magician
Who ties the Sun while the Moon rolls on.
Turn back, the green staff raising higher.

TcATcAKA NyAĭ, NAME SONG

[By Virsak Vâi-i, Hawk Flying]

There are seventy stanzas in this song. Two names are called in each, a name being inserted in place of the words here in brackets. The song may begin with any stanza, but the name of the place where the dance is held must be inserted as the first name: thus, in the stanza below, the name of the village would be substituted for "Ma-akahi."

I

Halakoit namanU vapaka worsanyUk mâhâïnama tcUAUli. (Repeat)
(?) top reeds arose placing increase in height.

HitaAU (Ma-akahi) moa-akatc yâhakaha hUkatcâĭ pawUsika kopatc maitcU-U.
This [ ] kills with painted with it all over hair knock down.

HitavU Hivayomi pUkatc yâhakaha hUkatcâĭ pawUsika katâtc maitcU-U. (Repeat)
This [ ] catch painted with it all over bow knock down.

II

Halakoĭt, ma-akahi wUma worsahi; halakoit (ma-akahi) wUma worsamU.
(?) magician with came up; (?) magician with came up.

HUkaitcUAU Ma-akahi kopatc maitcU-U; hUkaitcUAU Hivayomi katâtc maitcU-U.
That long [ ] hair knock down; that long [ ] bow knock down.

Translation

The ceremonial reeds are lifted;
  The ceremonial reeds are lifted.
Ma-akahi has killed an Apache,
  And we meet together here in war paint
To collect hair trophies with their power.
  Hivayomi has taken a captive,
And the magic of his bow dies with him.

Ma-akahi has come to our festa;
  Ma-akahi has come to our festa.
Ma-akahi ties the enemy's hair;
  Hivayomi kills the enemy's bow.

III

Siyal wutcâka huma-akahi yâhandak maitcu-u.
East under magician colored knock down.
Honony wutcâka humaakahi va-apaku yâhandak maitcu-u.
West under magician reed colored knock down.
Ma-akahi sapâauhu nyâ-âku ko-opatc maitcu-u; Hivayomi sapâauhu
[ ] correct talk hair knock down; [ ] correct
tcohi ka-atâtc maitcu-u.
do bow knock down.

IV

Imovali kâvâhaikĭ, kâvâhaikĭ, kaivaya, mokovaya tamâhi, (Repeat)
Near to rumbling, rumbling, passing, waving top go,
tamâmhu.
top go.
Hitavu Ma-akahi pahañgu aupuhâva kavandaimu na-aka worsahi;
This [ ] eagle like shield grasp arose;
hitava Hivayomi virsañga vupuhava rsânvitcuki muka worsamu.
this [ ] hawk like club grasping arose.

V

Kamonya imuka nyuwunda nyuitahi sikuñga kop maitcu-u.
There going land looking good hair knock down.
Komonyi munduku navañgá nyuitamhu sikuñgu, katâ maitcu-u.
There run mountain seeing run good, bow knock down.
Ma-akahi wumatc nyuitahi sikuñga kop maitcu-u; Hivayomi
[ ] with looking good hair knock down; [ ]
wumatc nyuitahi sikuñgu katâ maitcu-u.
with seeing good bow knock down.

Translation

On this side the East Land the magician
The sacred colored object has knocked down.
On this side the West Land the magician
The sacred colored reed has overthrown.
Ma-akahi wisely talks, tying hair;
Hivayomi wisely acts, killing bow.

The scout hears with trembling the sounds of night;
The scout hears with trembling the sounds of night.
Ma-akahi eagle-like grasps his shield;
Hivayomi hawk-like comes with his club.

Well-seeming is the land to the warrior
As he goes to collect an enemy's hair;
And its mountains, as he kills the bow.
Ma-akahi sees clearly as he ties the hair;
Hivayomi sees clearly as he kills the bow.

VI

Kakâtak tamai pahañgu naiwo-orsa, Yakimuli tamai virsangû
Crooked top eagle arose, river top hawk
naiwo-orsa.
arose.
Hitavu Ma-akahi pahañgu wumu nyâhâkukaʌu handa tañgu
This [ ] eagle with talk shield grasp
kaworsahi.
arise and go.
Hitavu Hivayomi virsañga wumu nyâhâka rsânyi-itcuki puhuka
This [ ] hawk with talk club grasp arise
worsamu.
and run.

VII

Tcunâkima kopanya ikitcu iya vawoʌapa.
Blue hair cut here brought.
Sivakimu katânyi muhuka iya vawovapa.
Full-leaved bow catch here brought.
Ma-akahi moaka hi-iya vu-unâñgiñga vovapa; Hivayomi mipuhi
[ ] kill here dizzy brought; [ ] catch
hi-iya vunavamoñgi vovapa.
here drunk brought.

VIII

Gamonya imuna; gamonya imuna; gamonya imuhuna.
There I going; there I going; there I go.
Gamonyi mununa; gamonyi mununa; gamonyi munuhuna.
There I run; there I run; there I run.
Itavu Ma-akahi paha yonanda hak tânlimuna; hitava Hivayoma
This [ ] eagle arrow feathers that shining; this [ ]
virsaka yomanda hak nyunyuvâïku.
hawk arrow feathers that air waves.

Translation

From the Superstition mountain rose the Eagle;
From the sluggish-moving Gila rose the Hawk.
Ma-akahi talked with the Eagle, then
Arose, grasped his shield, and went his way.
Hivayomi talked with the Hawk and then
Arose, grasped his club, and journeyed forth.

With hair trophies our courage is renewed.
Many of the enemy's bows we've captured.
Ma-akahi bravely endures fasting;
Hivayomi bravely endures all thirst.

There I am going; there I am going.
There I am running; there I am running.
Ma-akahi's eagle-feathered arrows!
Hivayomi's strong hawk-feathered arrows!

IX

HaliAUta sihuñi na-anakâ kainamU nyâkna yoviva sipUhimo
Brother older incoherent sounds talk woman take
kaiyavU nyâkna hatcyahami.
here talk accomplish.

HaliAUta sihuñi na-anakâ kainama nyUhUna yaliva sipUhimo
Brother older incoherent sounds sing child take
kaiyava nyUhUna hatcyahami.
here sing accomplish.

Itavu Ma-akahi na-anakâ kainamU nyâkna yoviva sipUhimo kaiyavU
This [ ] incoherent sounds talk woman take here
nyâkna hatcyahami.
talk accomplish.

Itavu Hivayomi na-anakâ kainama nyUhUna yaliva sipUhimo
This [ ] incoherent sounds sing child take
kaiyava nyUhUna hatcyahami.
here sing accomplish.

X

Hi-i-i yoliva hi-iyoliva ya viyoli-iva hi; (Repeat) mhU.
(?) (?) (?) (?) (?) go; run.

HihitaAU Ma-akahi ipoitatc tcUtânyu hi-i-iyoliva yaviyoli-ivahi.
This [ ] hard beating (?) (?)

Hihitava Hivayomi hUa tatc kâvânyU hi-i-iyoliva yaviyoli-ivamhU.
This [ ] mind (?) rattling (?) (?)

XI

PanUmand katcokatc vihili hana vili vawU-Upâ vatcohiña.
Coyote cub there it is (?) on (?) like appearance.
(Repeat)

HUkaitcUfU Ma-akahi pahaka wU-Upâ vatcohiña; hUkai tcUfU
That long [ ] eagle like appearance; that long
Hivayomi virsaka wU-Upâ vatcohiña.
[ ] hawk like appearance.

Translation

Elder Brother mumbling caught the woman;
Elder Brother crooning caught the child.
Ma-ahaki mumbling takes the woman;
Hivayomi crooning takes the child.

Hi-i-i yoliva! Hi yoliva!
Hi-i-i ya viyoli-iva mhU!
Ma-ahaki's heart trembles on the war path;
Hivayomi's soul shivers with its fear.

There's the Coyote cub, Coyote cub!
There's the Coyote cub, Coyote cub!
Ma-ahaki resembles the Eagle;
Hivayomi resembles the Hawk.

XII

Yavahimu yavahimu yavahi. (Repeat)
Yavahimu yavahi.
Yavahimu yavahimu yavamhu. (Repeat)
Yavahimu yavamhu.
Nañu suku Ma-akai taiwonyuk kavandai paimitco yavahimu
I guess that [ ] arose running shield (?)
yavahimu yavahimu yavahi, nañu suka Hivayomi taiwonyuk
(?) (?) (?) I guess that [ ] arose
rsânyitcuki mulitco, yavahimu yavamhu.
club make run, (?) (?)

Translation

Yavahimu, yavahimu, yavahi!
Yavahimu, yavahimu, yavahi!
Ma-akahi rose and ran with his shield;
Hivayomi rose and ran with his club.

CIRCLING SONGS[a]

Pa-ak Nyuĭ, Eagle Song

[Composed by Vârsâ Âkam, Rat-Back. Told by Ki-iwa]

Accompanied by dancing and the beating of baskets. The dancers move in a circle made up of men and women alternately. "It looks bad for two men to be together."

I

Tarsaiĭ gamai yononyimuta kun(d)a mânanahiwoakai tamaikû
Sun there go down in sit there
pahaka nyunyuĭ kop iyu rsănawoitco. (Repeat)
Eagle songs you here commence.
Makai ki tava worsanyhu kamo nyi paitci tcuwuju katcimhu.
Magician house arises before me in front land lays.
Tamaiku pahaka nyunyui kop iyu rsănawoitco. (Repeat)
There Eagle songs you here commence.

Translation

As the Sun sinks to the westward
We begin singing the eagle songs.
The home of the magician rises,
Standing before me in the land.
We begin singing the eagle songs.

[a] Sikâlhim Nyuĭ; called also Basket-beating songs, Hoa Rsârsûna.

II

Yâi kapi worsa, yâi kapi worsa; Hatcuwuɬu Makai, yâi kapi
Now order arises, now order arises; he Earth Doctor, now order
worsa (Repeat)
arises.

Yai kapi worsa, hinâvat awutcâ tcut nyunyui tcoma worsana
Now order arises, hidden below from songs there arise
tcuwuɬu yâĭnukamâ tcoatcoaiĭ. (Repeat)
land after planted.

III

Tcuwuɬu sapânyiki nyuĭ, tcuwuɬu sapânyiki nyuĭ, siyalĭñgû
Land right I see, land right I see, east
tañgĭo tcuɬ Itâĭ yahaɭ tcuwuɬu sapânyiki nyui. (Repeat)
direction from Elder Brother child land right I see.

Tcuwuɬu sapânyiki nyuĭ siyalĭñgû tañgĭo tcut Itâĭ yahaɭ tcuwuɬu
Land right I see, east direction from Elder Brother child land
sapânyiki nyuĭ. (Repeat)
right I see.

IV

Tâvañgû mai-ĭ, tâvañgû mai-ĭ; honoñyikû tañgĭo tcuɬ, Toakoatam
Mountain win, mountain win; west direction from, White-Eater
havivihi tavukû mai-ĭ. (Repeat)
she remained mountain win.

Tâvañgû mai-ĭ, honoñyikû tañgĭo tcuɬ, Toakoatam havivihi
Mountain win, west direction from, White-Eater she remained
tavukû mai-ĭ. (Repeat)
mountain win.

Translation

Earth Magician now comes hither;
  Earth Magician now comes hither.
From the depths the songs are rising,
  And by him are here established.

As now the land is prosperous;
  As now the land is prosperous
Elder Brother comes from the East;
  He comes here as a child might,
The land prospers with his coming.

It was in the western mountains
  That White-Eater Woman dwelt.
It was in the western mountains
  That White-Eater Woman dwelt.

V

Hononyĭ ikamoisi iwʊgiom kʊna ka-ayofika hawʊs anyivia
West there reddish in there bird they all came
hanânyi wʊñga nyĭ.
there around me.
Pahaka hanyʊnyâkĭ ivaʌuna hiyanyi imapai imaʌoaka anyʊĭna.
Eagle his voice stretched here I to you to touch to see.
haiya ha aiya haya haya ha-a! Hamʊkâ nyʊĭta. (Repeat)
haiya (?) (?) (?) (?) (?) You see.
Hiya nyi imapai imavoaka anyʊĭna, haiya ha aiya haya haya ha-a!
Here I to you to touch see, (?) (?) (?) (?) (?) (?)
Hamʊkâ nyʊĭta. (Repeat)
You see.

Translation

The evening glows red in the West,
And the birds here gather about me.
Now I hear the screams of the Eagle.
Haiya ha aiya haya haya ha-a!
Now I meet and see you. Haiya ha!

HOA RSASÊNA NYÂĬ BASKET-BEATING SONG

[By Virsak Vâi-i]

I

Kanʊ vavai kokoana iyaimʊ. (Repeat)
Yonder cliff end roll.
Vavaki yʊwʊlimʊ. (Repeat)
Steep house windy.
Hitʊ ma-akahi yʊwʊlikatci opamana vitana, kanʊ vavai kokoana
This magician windy with turn back wind borne, yonder cliff end
iyaimʊ.
roll.
Vavaki yʊwʊlimʊ. (Repeat)
Steep house windy.

II

Siyaɩ tânʊndâka mʊhʊka mʊɩʊna sikoɩi kamhovatcokahi yahana
Morning dawn far running younger brother preceding feather-
rsoliñgahimʊ. (Repeat)
throwing.

Translation

Roll from cliff end to cliff end,
Roll, Winds, from the steep house walls.
Thus the growing excitement
Gathers like the winds that blow
From the house of Wind Magician.

In the East, my younger brothers,
We are preceded by the bearers
Of the sacred eagle feathers.
In the East, my younger brothers,
We are preceded by the bearers
Of the sacred eagle feathers.

III

Pahaku yâitañga mutânyunu. (Repeat)
Eagle field thud.
Sahapâ kainama mutânyimu tcorsaɲi pumunaikmu-u. (Repeat; then sing all twice)
Agreeable sounding thud rolling thunder.

Translation

In the distant land of Eagle,
In the distant land of Eagle
Sounds the harmonious rolling
Of reverberating thunder.

KIKITÂVAL NYUÏ, SWALLOW SONG

[By Ki-iwa]

A song for fiestas that is accompanied by dancing.

I

Kikitâvalĭ yofĭñgû hiyany wuwuma nyunyuĭ ivamâ rsârsânûtco
Swallow birds here with me songs more commence
hiyamy wuwuma nyuhuta-a. (Repeat)
here with me singing.
Rsâĭngama so-ofĭ yumapĭm olĭna-a hiyany wuwuma nyuhuta-a.
Poor women together stay here with me singing.
(Repeat)

II

Vavaisa ñiñĭtâvalĭ nam kuka-a, vavaisa ñiñĭtâvalĭ nam kuka-a;
Rocks swallows meet standing, rocks swallows meet standing;
kuɲamâ nyovapa-a, kuɲamâ nyovapa-a, hanâny wuwukany tcutâñĭa
there me brought, there me brought, there me around blue
kikihyâtû wovakĭmhû. (Repeat)
rainbows appeared.
Vavaisa ñiñĭtâvalĭ nam kuka-a kuɲamâ nyovapa-a hanâny wuwukany
Rocks swallows meet standing there me brought there me around
tcutâñgĭa kikihyâɲû wovakĭmhu. (Repeat)
blue rainbows appeared.

Translation

Now the Swallow begins his singing;
Now the Swallow begins his singing.
And the women who are with me,
The poor women commence to sing.

The Swallows met in the standing cliffs;
The Swallows met in the standing cliffs.
And the rainbows arched above me,
There the blue rainbow arches met.

III

Tcotcoka kiñitâʌa|d hiatâvâĭʌUka, hiatâvâĭʌUka monyĭ vanyimuɿa
Black swallows (they) here running came, (they) here running came took leading me
kamU kâĭ-ĭny vanyimuɿa. (Repeat)
there me brought me.

HiatâvâĭʌUkahi kamU kâĭ-ĭny vanyimuɿa kamU kâĭ-ĭny vanyimuɿa.
Here running came there me leading me there me leading me.
(Repeat)

IV

Haiya! Rsâĭñga tcUʌUñgĭ pi yUnañgita-a kahosiyalĭ ʌUpUtcâhâ
Alas! Poor clouds not discoverable far in the east under
tâʌanga itcU-uɿaa hamU katcU konya-am himUlivUka-a. (Repeat)
mountain in there lay I there arrived running.

TcUʌUñgi pi yUnañgita-a kaho siyalĭ ʌUpUtcâhâ tâʌanga itcU-Uta-a
Clouds not discoverable far in the east under mountain in there
hamU katcU konya-am himUliʌUka-a. (Repeat)
lay I there arrived running.

V

Vatciki hyoata pUngâ hihivaka nyUhUna, vatciki yoa tapUngâ
We are basket scraping singing, we are basket
hihivaka nyUhUna; hodony muɿa vahamUtânyU konyUñgU kaitcoñga
scraping singing; evening in thud I am listening
hitanyi yahana kokana tcUfa kianû rsaitcoñga. (Repeat)
this my feathers tips clouds there hanging.

Vatciki hyoata pUngâ hihivaka nyUhUna; hodony muɿa vahamUtânyU
We are basket scraping singing: evening in thud
konyUñgU kaitcoñga hitanyi yahana kokana tcUfa kianû rsaitcoñga.
I am listening this my feathers tips clouds there hanging.
(Repeat)

Translation

The Black Swallows running hither;
The Black Swallows running hither,
Running hither came to lead me,
Lead me there, lead me there.

Haiya! Far in the distant east
Lie the clouds hidden under the mountain.
Far in the east direction
To the hidden clouds come running.

We are beating the basket drums;
We are beating the basket drums.
I am singing, I am listening;
From my feathers clouds are shaking.

VI

Vanyu tânânaduñgû kamudûkai vapamoɪ(d) rsorsonakĭ; namba
I am dizzy run bog water; there
nanyinyiviha kuɹa uk mâkâfaɹ nyuta-a vapaaka ñgiñgi rsa-aka ihya
I came in there tadpole singing reeds bark girdle here
vanyuta. (Repeat)
singing.

Vapamoɪ(d) rsorsonaki namba nanyinyiviha kuɹa uk mâkâfaɹ nyuta-a
Bog water there I came in there tadpole singing
vapa-aka ñgiñgi rsa-aka ihya vanyuta. (Repeat)
reeds bark girdle here singing.

VII

Hodony kânyunyuAund katcu tamai sitcunâ-âki vañgitcud yâĭmuɹa
Evening land lay top very blue dragon fly going
rsona-aki nanamai, Auañgihya hunyul mamai kany rsotañgi tcoakana.
water top, hanging his tail with water stick in.
(Repeat)

Kony hya-ama nyinyiviha kanyuita hunyul mamai kany rsonañgi
I there came see his tail with water
tcoakana yanakuAi rsamhonyu.
stick in flapping rustling.

VIII

Himonyi munu-una, himonyi munu-una; tcokañgia sisikimu,
There I run, there I run; darkness rattling,
tcokañgia sisikimu-u, tciavoɪd hyâsinga kony hunga sifânatcama
darkness rattling, visnaga flowers I that wear in hair
nyuimulhimu. (Repeat)
singing place going to.

Himonyi munu-una, tcokañgia sisikimu, tcokañgia sisikimu-u,
There I run, darkness rattling, darkness rattling,
tciavoɪd hyasiñga kony hunga sifânatcama nyuimulhimu. (Repeat)
visnaga flowers I that wear in hair singing place going to.

Translation

I ran into the swamp confused;
  There I heard the Tadpoles singing.
I ran into the swamp confused,
  Where the bark-clothed Tadpoles sang.

In the West the Dragonfly wanders,
  Skimming the surfaces of the pools,
Touching only with his tail. He skims
  With flapping and rustling wings.

Thence I run as the darkness gathers,
  Wearing cactus flowers in my hair.
Thence I run as the darkness gathers,
  In fluttering darkness to the singing place.

IX

Sikâla imuta vanyi kinyonyoi vawupâ nyiwoatà-a, hai-iya!
Round going I vulture like I make, haiya!
Tamaiau katcimu parsâ vanyolina kanyuita-a itâvanya ipuinanga
Top laying near by to I stay see this breath
tcutcunâñgu-u. (Repeat)
blue.

Tamaivu katcimu parsâ vanyolina kanyuita-a itâvanya ipuinañga
Top laying near by to I stay see this breath
tcutcunâñgu-u. (Repeat)
blue.

X

Aungihomi nakamula, aungihomi nakamula; hiâaat nyuihunda
Reddish bat, reddish bat; here song end
aâkamunanahakimu pahañga viviñgi hukanyĭ sivânatconaha aâkamu-
rejoices eagle down that I put in head dress re-
nanahakimu pawoĭ yâsi-imu.
joices pawoi (tree) flower.

Translation

I am circling like the Vulture,
  Staying, flying near the blue.
I am circling like the Vulture,
  Breathing, flying near the blue.

Now the Reddish Bat rejoices
  In the songs which we are singing;
He rejoices in the eagle down
  With which we ornament our headdress.

Hâhâkimai Nyaĭ, Butterfly Song

[By Virsak Vai-i]

I

Yâkimaĺi nyunyui rsânatco, yâkimaĺi nyunyui rsanatco; *vatâ
Butterfly song commence, butterfly song commence; they
tcotconaku yahaipu vapaki(f)wa komoinanyi yovaiya pumuhimu-u.
dance either side to and fro smoke raise higher.
(Repeat all; then repeat four times from *)

II

Yâkimaĺ yofiñu, yâkimaĺi yofiñu, *mohomoi nyuhiau rsânatco
Butterfly bird, butterfly bird, many song commence
wuhuwui nyi nuduna kita rsârsânûk komuhi. (Repeat all;
toward I run house close to dust.
then repeat twice from *)

Translation

The Butterfly song we now commence;
  The Butterfly song we now commence,
Dancing on sides to and fro
  Until the dust arises.

The Butterfly Bird, the Butterfly Bird
  Commences to sing his many songs.
I run to where the dust arises,
  Close to the walls of the house.

III

Vanyiki yUmotci nyUnyUiAU rsânatco. (Repeat)
I am now song commence.
*Konyami kakayâk wUhUAUi nyi mUdUkai konyka wUmaika
I there heard toward me run I that with
wUmanyi rsânawoitco. (Repeat all; then repeat twice from *)
with him commence.

IV

Yonofañgu yahaka mohofi *yakanyhi wUwUmU rsânawoitco,
Cat-tail leaf woman here me with commence,
hinhovat wUganya himihimU iakoñga nyi iovaha hayany
in there round going here my taking here
imamarsâkU mawoihimUna-a. (Repeat all; then repeat twice from *)
my breast touch.

V

Mâtcipand Unâvañgu moi tcUAañgi katci wUma nyUna.
Ma-atcpat mountain toward cloud lay with singing.
(Repeat)
*KâmUndak Unâvañgu piâ kiaya tcUAañgi katci wUmâ nyUhUna-a.
Kâ'matûk mountain not have cloud lay with singing.
(Repeat all; then repeat twice from *. Sing four times)

VI

Mokalĭ nâvañgU kUhUka, mokalĭ tâvañgU kUhUka; * yaifiñgia
Dead mountain standing, dead mountain standing; hurry
imUkama tciviyaka nyUitana sikolĭ kâkiwonda yUwUhUlitc
run arrive see younger brother I guess wind his
an avaiyU ñgagaiva mUndUhUna-a. (Repeat as above)
there pass across run.

Translation

I commence the song, I commence the song.
  I heard the singing as I ran;
I heard the singing as I ran.
  I join in with the singing.

The Cat-tail Woman commences singing;
  The Cat-tail Woman commences singing.
I join the circling dancers,
  Striking my breast and singing.

I sail in the clouds to Table mountain;
  I sail in the clouds to Table mountain,
And I sing with Kâ'matûk mountain
  Upon which there are no clouds.

Hurry to the Dead Standing mountain;
  Hurry to the Dead Standing mountain.
See there, my Younger Brother,
  How the winds there run their course.

VII

Mâyaɩ Nâvañgu, Mâyaɩ Nâvañgu, * hanâvanyi wutcoma
Ma-ayal mountain, Ma-ayal mountain, yonder before
tcuwuɩ unakiomainu hamâvaki yundañga yohof(ĭ) yuhumuna-a.
land strip house in woman laughing.
(Repeat as above)

VIII

Kakândaku Nâvañgu yalikâpa nyuna. (Repeat)
Kakotuk mountain down hill singing.
* Tâtârsaki ñgingikoatci muɩiva kuuwusi tcunangi rsonañgitco-o.
Foam head band came running kind that blue water.
(Repeat as above)

Translation

At the clearing of Ma-ayal mountain;
At the clearing of Ma-ayal mountain,
Before the house of the Magician,
There stands the woman laughing.

Here on the slopes of Crooked mountain;
Here on the slopes of Crooked mountain,
Around whose crest the foam remains,
We have run for blue water.

GAME SONGS

TÂKAɩ(D) NYAĬ, TÂKAL SONG[a]

[By Virsak Vâl-I]

I

Tâkalimhu, tâkalimhu, * tâĭta wiva yuwuli mulitco-o. (Repeat all;
Takalimhu, takalimhu, our field toward wind make run.
then repeat twice from *)

Translation

Takalimhu, takalimhu,
The wind helps us with our ala
When we play the game of takal(d).
Takalimhu, takalimhu,
The wind helps us with our ala
When we play the game of takal(d).
The wind helps us with our ala
When we play the game of takal(d).
The wind helps us with our ala
When we play the game of takal(d).

[a] This song is sung in the evening, and during the next day the women play the game called Tâkaɩ(d).

II

Huwuli mulitcona, *huwuli mulitcona hukanyki tâkalimu wusi
Wind, make it run, wind make it run that I with takal(d) all
kukuhuva-a. (Repeat as above)
win.

Translation

Wind, swiftly make our ala run
That I may win at takal(d).
Wind, swiftly make our ala run
That I may win at takal(d),
That I may win at takal(d),
That I may win at takal(d).

WOITCOTA OR RSÂNYKI NYAÏ, FOOTBALL SONG [a]

[By Virsak Vâl-i]

I

Momoi yânama humiaki nyiâkimu. (Repeat) *Konyu simâ
Many people together talking. That I there
kukiwak yosi kawonaku naitcona kitâvalï yofiñgu nyapâyanuñgu
stand stick ball throw swallow bird me flapping
vimu. (Repeat all; then repeat twice from *)
(?)

II

Tcokoikamu tânâvañgu *kamova hondonyiñgu parsâva kukimuta
Black mountain far west this side stand
samukâ wuwuï pamumulimu tarsai yunda nyoka wuñgany naipimu.
toward run sun in middle round run.
(Repeat as above)

III

Tawot yatamu *komûs siny wunata-aku vany mulitco kamova
Who man you me with me run there
tcokama nyuitaimu hinavany nyoñgi ta numamanguvi yukaimu
goal looking there me in front of waving the hands his shadow?
(Repeat as above)

Translation

Many people have gathered together,
I am ready to start in the race,
And the Swallow with beating wings
Cools me in readiness for the word.

Far in the west stands the Black mountain
Around which our racers ran at noon.
Who is this man running with me,
The shadow of whose hands I see?

[a] Sung the evening before the day of the foot race.

VÂPÛTAI NYAĬ, LAY SONG [a]

[By Virsak Vâĭ-ĭ]

I

Yandundo itcaya, yandundo itcaya. (Sing three times)

II

Yandundo iya-andundo. (Sing three times)

Hoho kaviyo fund, ama aimivakavi yo fund; ova, ova, yo wiyanhi hila atcovayo nimiya no kiyaho. Hoho kaviyo fund ama, âĭniva kaviyo fund. (Repeated until the opponents guess where the sticks are)

A-AL HATCITCIVITAK NYAĬ, CHILDREN PLAY SONG

[By Sika'tcu, Dry]

Auk'imûlolo tak vaiwana. (Repeat indefinitely)

The children clasp hands and dance and sing this song. They are divided into two parties, one leader saying â'nûmatcĭt and the other kĭl'siyâ.

HUNTING SONGS

KÂTATÂPĬ NYAĬ, DATURA SONG [b]

[By Virsak Vâĭ-ĭ]

I

Tâhaiva siyalĭ kukĭm, *tâhaiva siyalĭ kukĭm; kuta nyi worsanyûk
White morning stand, white morning stand; in I arose
hi-ĭm. (Repeat from *)
go.

Tcutâñgĭ yondany kuñgusĭm, *tcutâñgĭ yondany kuñgusĭn; kuta nyi
Blue evening falls, blue evening falls; in I
worsanyûk hi-ĭm. (Repeat from *)
arose go.

Translation

At the time of the White Dawn;
At the time of the White Dawn,
I arose and went away.
At Blue Nightfall I went away.

---

[a] Derived from another tribe, but from which is not known. The meaning of the words is not known to the Pimas.

[b] This and the Pihol song are sung to bring success when setting out on a deer hunt. This song is principally depended upon in cases of sickness where the characteristic symptoms are vomiting and dizziness.

II

Kâtundami[a] ya-ahañgu, *kâtundami ya-ahañgu; konyitcoma
Thornapple leaves, thornapple leaves; I that
hoñgiyâk nânɟahangu rsakalĭ mumulihimu. (Repeat all; then repeat
eat dizzy stagger run.
from *)

Kâtundami yâsĭñgu, * kâtundami yâsĭñgu; tcoma hiyâku navahamo
Thornapple flowers, thornapple flowers; that drink drunk
rsakalĭ mumulihimu. (Repeat from *)
stagger run.

III

Kakatâ kuviholi yânamu nyâĭta-a, *hiyavâ nyiahu vatâny, mumoak
Bows great remaining man following, here overtook he me, killed
inyi, wopa hitany yahañga hikomiaka rsolĭñga-a. (Repeat from *)
me, left this my horns cut off throw away.

Vapakâ kuviholi yânamu nyâĭta-a, *hiyavâ nyiahu vatâny,
Reeds great remaining man following, here overtook he me,
mumoak inyi, wopa hitany nânhavia hikomiaka rsolĭñga-a. (Repeat
killed me, left this my feet cut off throw away.
from *)

IV

Momovali nâtakimu, *momovali nâtakimu, kaɟoho miawaka hamâ
Fly crazy, fly crazy, there drop there
yanaki taimhu-u. (Repeat from *)
flap.

*Yâkimalĭ navakâhi, yâkimalĭ navakâhi, kaɟoho miawaka hamâ tapai
Butterfly drunk, Butterfly drunk, there drop there open
kimu-u. (Repeat from *)
and shut wings.

Translation

I ate the thornapple leaves
And the leaves made me dizzy.
I drank thornapple flowers
And the drink made me stagger.

The hunter, Bow-remaining,
He overtook and killed me,
Cut and threw my horns away.
The hunter, Reed-remaining,
He overtook and killed me,
Cut and threw my feet away.

Now the flies become crazy
And they drop with flapping wings.
The drunken butterflies sit
With opening and shutting wings.

---

[a] A native thornapple, Datura meteloides D. C. It is popularly believed that if one eat an undivided root it will render him temporarily insane, but if the root be divided or branching it is innocuous. There is a tradition that a man at Blackwater ate of the root and directed that he be locked in an empty house until the effects should wear off. He was locked in at noon and toward evening he was seen running through the thickets toward the river a couple of miles distant. He recovered his senses when in the middle of a thorny thicket of mesquites. His limbs were scratched and bruised, yet he had been unconscious of any injury until the moment of recovering his wits.

PIHOT NYAĬ, PIHOL SONG

[By Virsak VÂI-I]

I

Yali tcovu makai tcokak ut muɿutatc yoai tcokak yoapa,
Younger hare magician blackness in running black-tailed deer meat bring

sialĭm antâ yoapa, sialĭm antâ yoapa-a. Yali kaʌu makai tcokak ut
morning I will bring, morning I will bring. Younger badger magician blackness in

muɿutatc yoai tatat yoapa, sialĭm antâ yoaka, sialĭm antâ yoapa-a.
running black-tailed deer feet bring, morning I will bring, morning I will bring.

(Repeat four times)

II

Nany pia hyuwulĭk, nany pia yuwulĭk, nany pia hayuwuli-ika-a.
Had I no wind, had I no wind, had I no wind.

Nany pia hatcuʌakĭk, nany pia tcuvakĭk, nany hatcuva ki-ika-a.
Had I no clouds, had I no clouds. had I no clouds.

Kahova siyalĭ wutca sâhama Ikoɿ kukatc yamhâ nyu vaita, nany pia
Distant east under yellow (?) standing there me calling, had I no

yuwulĭk, nany pia hayuwuli-ika-a. Kamhova hondony wutca sâhama
wind, had I no wind. There west under yellow

Ikoɿ kukatc yamhâ nyu vaita, nany pia yuwulĭk, nany pia
(?) standing there me calling, had I no wind, had I no

hayuwuli-ika-a. Kamhova hondony wutcâ sâhama Ikoɿ kukatc
wind. There west under yellow (?) standing

yamhâ nyu vaita, nany pai tcuwukĭk, nany pia hatcuwuki-ika-a.
there me calling, had I no clouds, had I no clouds.

Translation

Young Hare Magician running
  Brings black-tailed deer venison.
And young Badger Magician
  Brings the feet of black-tailed deer.

Had I neither winds or clouds?
  In the east the Yellow Ikol,
In the west the Yellow Ikol
  Called me. I had no winds or clouds.

MEDICINE SONGS

Toatcita Nyăĭ, Cure Song[a]

[By Juan Thomas]

I

Hodony ʌungiomima kâĭhowa nyopinyima, hodony ʌungiomima
Evening red not yet sink, evening red
kâĭhowa nyopinyima; *kony sʊña yʊna tcomʊ nahivaka nyʊina
not yet sink; me I in there sit see
itanyi rsâvikŏna sikâ[mʊnʊkai mʊ]a sisĭnyi hikimʊ.
my gourd round run in rattling hikimu.

Hodony ʌungiomima kâĭhowa nyopinyima, hodony ʌungiomima
kâĭhowa nyopinyima; **kony sʊña yʊna tcomʊ nahivaka nyʊina
itanyi matcuowina sikâ[mʊnʊkai mʊ]a pʊpʊnai hikimʊ. (Repeat
feathers rumbling
to *)

Kony sʊña yʊna tcomʊ nahivaka nyʊina itanyi rsâvikŏna sikâ[
I I in there sit see this my gourd (?)
mʊnʊkai mʊ]a sisinyi, hikimʊ. (Sing from **)
(?) (?) (?) (?)

Kony sʊña yʊna tcomʊ nahivaka nyʊina itanyi matcuowina sikâ[
(?) (?) (?) (?) (?) (?) (?) feathers
mʊnʊkai mʊ]a pʊpʊnai hikimʊ. (Repeat all four times)

II

Kʊs sitcoña mʊʌany vâñĭnyi taiĭma. (Repeat)
Kind of all night he me shaking.

Kaho makai kiyʊndavam nyoapaimʊ kʊs sitcoña mʊʌany vâñĭnyi
Up there magician's house in there me brought kind of all night he me
taiĭma. (Repeat second line; then repeat all four times)
shaking.

Translation

The evening glow yet lingers;
The evening glow yet lingers,
And I sit with my gourd rattle
Engaged in the sacred chant.
As I wave the eagle feathers
We hear the magic sounding.

Puissant Night is shaking me
Just as he did at the time
When I was taken up in spirit
To the great Magician's house.

---

[a] This song was sung by a Blackwater medicine-man when making his diagnosis of a case. In this connection read the history of Sala Hina's treatment when poisoned (p. 260).

III

Alisi yoa-amu vavatcosĭ hutcuɪ ya-ana yopanaka yukatc vanyi
Kind of yellow wren himself feathers pull out with it make me
tcupaftcona *hiyanyi mâmâtamu maʌursapaiĭmu tcuwunda wusikâ
prostitute here my head clasp hands land all over
mumuhulimu. (Repeat; then repeat twice from *; repeat all four
run.
times)

IV

Alisi tcutcunañĭ kâlâkamu * tcuwunda loñitan(u) tcutâñi yuwulhula
Kind of blue kakakamu land edge blue wind
vâĭrsapaiĭmu tâta yuwulhula vipiahimu vatâĭ huʌundak tcunyuwuna
lying on white wind left make wind land
kopânyima. (Repeat as above)
dust.

V

Mamursanû tânâli kia nyuʒa viñĭ kukionyût. *Amukâ valnyuihita
Moons shine here me in here stand. You men will see
nalo-oʒi tcutañi vapukanyi kohona varsoi muk nyi nanamu. (Repeat
women blue reed me blow far distant me meet.
as above)

VI

Haiya! Haiya! Rsâvikohot man sisikimu. (Repeat)
Haiya! Haiya! Gourd there rattling.
Konyu wuwuiʌa himûk am nyuita himan vâĭtcokimu rsâvikohot
That I toward go there see laying gourd
man sisikimu. (Repeat; then repeat all four times)
there rattling.

Translation

Yellow Bird placed his feathers
  Where they fell on the head of the woman;
Making of her a harlot who ran about
  With her hands clasped before her.

Bluebird drifted at the edge of the world,
  Drifted along upon the blue wind.
White Wind went down from his dwelling
  And raised dust upon the earth.

The moonshine abides in me;
  And soon you men and women will see
The reed that I now am blowing
  Bring the Moon down to meet me.

Haiya! The gourd is rattling;
  Haiya! The gourd is rattling.
When I go to see it there
  I surely find it rattling.

VII

Kotc yumoiva loɟony taimu, kotc yumoiva loɟony taimu; ha
We now evening taimu, we now evening taimu; our
rsursupinyimu * kusu tâta mâhâmama kiñi tâvalĭ matcuwoena ñĭngi
younger brothers kind of white headed swallow (bird) wing feathers four
kaya putânyinaha kiya loɟony taiĭmu. (Repeat; then repeat twice
there rattling here evening taiĭmu.
from *. Sing all four times)

VIII

Litâĭ Makai * vapaka likotcuku kamo nyi paitcomi vopa
Elder Brother reed magician cut yonder me before in front throw
kuirsapaiĭmu kunɟak tcuʌañĭ kaitañima. (Repeat from *. Sing all
step on in clouds sounding.
four times)

IX

Alisi kâkâmaki Wumukalĭ * vâvɟiki s'oam aiitco tconyitcokimu
Kind of gray Coyote he is yellow something making
p'mumus huk vamät an kiwonatcoña. (Repeat all; then repeat twice
meddler that snake there belt.
from *)

X

Aliwusi tcutâñi papat lohoɟi namkâk varso nyi nanamûk kamhony
Kind of blue frog woman meet there me meet somewhere
puĭtcokimu * kaho sialiñu. Marsâ sutâta tcuʌakia pâĭtcotco hamuñu
carry me yonder east. Front white clouds there stand there
yâĭnuka pâiny puĭ tcokimu. (Repeat all; then repeat twice from *)
after me carry me.

Translation

It is evening, it is evening.
  And four times at evening
Calls the white-headed Swallow
  As he plucks out his feathers.

Elder Brother cuts his reed,
  Yonder before me now he throws it,
Stepping upon it so that the
  Clouds loudly repeat the sound.

Gray Coyote is a dirty meddler,
  He wears a belt of snake skin.
Gray Coyote is a dirty meddler,
  He wears a belt of snake skin.

Blue Frog-woman met and carried me
  To the cloud land in the East.
Blue Frog-woman met and carried me
  To where the clouds are standing.

XI

Kokakĭ momovĭny tcuʃuhulimu *kunʒa kus kâmaki Wumukalĭ,
Wood triangle rising in kind of gray Coyote,
naiwonyima uyânu kaiau matcuowina hukanyâĭ nyi tânâlhitaimu.
arose at one side of the back wing feathers with it me shine.

XII

Yâĭnupanu tâtâvaña *kuʒaña Litâĭ tcunyuwunda tcopolitaiimu
Dead field mountain in Elder Brother land rectangular
kŏnyu huñu yunda mâvavaka nyuina konyu huñu nyuita-imu.
I in that in enter there see I in that saw.

XIII

Alwus yoa-am vavatcosĭ *kahamova muhumukâ tcutcâkamu
Kind of yellow wren yonder distant caves
tâtâvañu woeka punyĭ puĭtcokimu kamodanyi mamaitcomhi
mountain toward there me carry me before me close to
pâkunyĭm tcukahima.
thump so far.

XIV

Alwusu kâkâmañi Taʒrai wotu makai kamhu mamaʒatc piohokimu
Kind of gray Road-runner he magician he young his hungry
tcom rsoakimonha *hia tâtaiwonyk tcutcuwuna tcutcumâka
then cry here arose lands everywhere
mumuhulima alaâpâyolĭ mumoahak kuarsatc kahĭ yan mâtâĭ
running millipeds killed approaching across there carry
tcoña.
on back.

Translation

Gray Coyote stood in the forest,
  From his shoulders he plucked feathers
That gave me shining power,
  Plucked wing feathers bearing power.

I entered Yâĭnupanu mountain
  And saw Elder Brother's land
Marked off with its square corners,
  Marked as in a rectangle.

Yellow Bird carries me to the caves,
  To the distant caves of the mountain.
And we hear the sound of his footsteps
  As he moves upon his way.

Gray Road-runner, the magician,
  As his young cried out with hunger,
Ran about engaged in killing
  Millipeds that he carried home.

XV

Alwusu tcotcok kâmkitcuma *tcokañi ñiopondak varsatc
Kind of black turtle darkness made a belt toward
vâĭtcokimu am kai panyumunda tcokaki yoñu nyitaimu.
laying there make shake darkness shaking nyitaimu.

XVI

Icupaf yohofi naiwonyk *anâvany wuwukany mumuhulimu yâvany
Harlot woman arose and run around me me ran here me
pamarsâĭpu mamakuAa.
breast beat the air.

XVII

Âiñâ smamatcun rsursupĭnyĭ *inañu tarsai kaho toconyihima
Hurry know younger brothers around sun up there come up
yâĭñâ smamatcun rsursupĭnyĭ kâsikâyany mamaka himu.
hurry know my younger brothers drowsiness gave himu.

Translation

The Black Turtle now approaches us,
Wearing and shaking his belt of night.
The Black Turtle now approaches us,
Wearing and shaking his belt of night.

The harlot arose and ran about,
Beating her breast and the air.
The harlot arose and ran about,
Beating her breast and the air.

Understand, my younger brothers,
That it is the Sun that gives me
The trance vision that I see.
The Sun gives magic power.

Kâmkatcat Nyaĭ, Turtle Song

[By Virsak Vâi-i]

Sivany lahai, sivany lahai, sivany lahai, sivany lahai. (Repeat)
Chief told, chief told, chief told, chief told.
Kuwusi kuhuñga siyali worsa kundañgu pahaka wuwumia nyukai,
Kind of good morning rise at the same time eagle with sang,
sivany lahai, sivany lahai. Kuwusi kuhuñga hondony tcopi kundañga
chief told, chief told. Kind of good evening sank at the same time
virsaka wuwumia nyukai, sivany lahai, sivany lahai. (Repeat four
hawk with sang, chief told, chief told.
times)

Translation

Tell their leader, tell their leader;
With their leader sings the Eagle
When the morning dawn is here;
Hawk sings with him at even.

Kâmkutcut, kâmkutcut, papt vatcĭvĭ varso hutcuı rsotk ut vatcĭvĭ,
Turtle, turtle, where swim there pond water in swim
kosta, kosta, kosta, kosta, kosta, kosta. (Repeat four times)
(?) (?) (?) (?) (?) (?)

Translation

Turtle, Turtle, where are you?
Where is the pond in which you swim?
Kosta, kosta, kosta, kosta,
Where is the water you swim in?

TCUMAMAIKĬ NYUĬ, HORNED TOAD SONG

[By Virsak Vâi-i]

I

Siyalikâ nyunyuwuta vasitu mâhâĭtama tcohiñga. (Repeat)
East direction land pleasant looks.
*Konyuka wuhuwuĭva himukâ nyuita vasitu mâhâĭtama tcohiñga.
I that toward go see pleasant looks.
(Repeat as above)

II

Hondonyikâ nyunyuwutu vasita mupuitama tcohiñga. (Repeat)
West direction land very fearful looks.
*Samukâ wuhuwuiva mundu ka nyuita vasita mupuitama tcoiñga.
There toward run see very fearful looks.
(Repeat as above)

Translation

The East Land seems very pleasant.
I go toward it and I see
How pleasant it seems to be.
I go toward the Pleasant Land.

West Land is most terrible.
I go toward it and I see
How terrible the Land is.
I go toward the fearful Land.

TCIATAKĬ NYUĬ, GILA MONSTER SONG

[By Sutatk(i), Prepare]

I

Rsâĭngali tcupafi yohof, *kâĭhova yon(d)onyima nyi moitaku
Pitiable prostitute woman, not yet evening me soul
yâhâsimu kahova nyâĭnaka tcupafia nyi moitaku yâhâsimu.
flower up after prostitute me heart flower.
(Repeat; then repeat from*. Sing all four times)

Translation

Pitiable harlot though I am,
My heart glows with the singing
While the evening yet is young.
My heart glows with the singing.

II

Ya-aɩ vavaitcotcom hanâvany ʌuñganyi ñgâñgâkĭ nyukai *hami
That stone standing there around two sing there
tamai tcokañgi huwun(d)aku noahimu kâinaku yahai yanañguhuʌa.
top black wind roaring after back and forth flutter.
(Repeat as above)

III

Ya-aɩ tâhai Ñgiwolĭk, *hami tamai sutcunañgĭ mamahat nyu-uhuna
That white Ñgiwolik, there top green frog singing
kusu tcuñañgi tcuvakĭ kahatc momoi nyuhuna. (Repeat as above)
kind of blue clouds lay many singing.

Translation

Where the two stones were standing,
  Black Wind roared in fearful blasts,
Driving the birds before him
  Fluttering back and forth.

On the summit of white Ñgiwolik
  There the green frogs are singing.
Lying near the blue storm clouds
  There many frogs are singing.

Tcoso-oka'i Nyui, Black Lizard Song

[By Ha-ata, Finished Olla]

I

Makai ki wupuku nyuĭtco, *makai ki wupuku nyuĭtco, sikoɩ tarsai
Magician house first sing to, magician house first sing to, round sun
tcursunyĭng tarsai sisvân huwuwum haimhuna-a. (Repeat; then
arose sun rays with go.
repeat from *. Sing all four times)

II

Tcutcupavi yohofi kaka wondu ʌâĭfimuna, *tcutcupavi yohofi
Prostitute women group come running, prostitute women
kakawondu ʌâĭfimuna, tcutcupavi ʌâĭfununa hikimoli yâsika
group come running, prostitute come running (a plant) flower
ñgĭñgikoatci ʌâĭfimuna-a. (Repeat as above)
crowns come running.

Translation

We first sing at the Magician's;
  We first sing at the Magician's,
The round disk of the Sun arose,
  Accompanied with its rays.

Harlots came running in a group;
  Harlots came running in a group.
Harlots came with hikimoli,
  Flower crowns upon their heads.

III

Hali wusu tcotcok tcosokalĭ *Hitâĭ mulkon kâĭnak tâta tcuʌahañgi
That kind of black lizard Elder Brother of running trail following white clouds
nyuyâpa nânâvitc ăĭnak kuhuwus tâtam rsorsoñgimu. (Repeat as
came out arms following kind of white pools.
above)

IV

Yali vaʌuñgam navañgu *tamai tcokaki yondunyihimu, wukanyi
That stony mountain top darkness go down, round
minyumu tataip yoakoñgimu. (Repeat as above)
going backward scatter.

V

Hali wusu ʌupuñgiom vapamandu tâkunându vinyina tcoikatc
That kind of reddish snakes spider string like
yondunyu, kamovingi yondonyikâ vaʌana tâkûnându vinyina tcoika
came down there, west direction stretched spider string like
yahai puvaopana-a.
opposite sides stretching.

Translation

Black Lizard found the trail where
Elder Brother had been running,
And he came out from the clouds
With water upon his arms.

Darkness settles on the summit
Of the great Stony mountain.
There circling round it settles
On the great Stony mountain.

The ruddy beams like spider threads
Across the sky came streaming.
The reddish snakes like spider's web
To the opposite side came flaming.

KÂKÂĬ NYUĬ, RATTLESNAKE SONG

[By Ki-iwa]

I

Yalova yondonaa kanyuhuta, *yalova yondonaa kanyuhuta;
Early evening I sing, early evening I sing;
kamodanyĭ mamatcomĭ nyunyuĭ ʌumamatâkaimu konyhuñga
ahead of me in front songs open I that
wuhuʌuma momoiva nyuhu-una. (Repeat from beginning; then
with many singing.
repeat twice from *)

Translation

In the early evening,
In the early evening
We begin to sing many songs;
And I join in singing many.

II

Kâmundaku nânâvaka worsanyimu, *hamalĭ mamarsâka likorsapĭ
Kâ'matûk mountain came forth, there near low clouds
nyuyâpakimu-u. Kâmundaku nânâvaku miapitaimu kokongama
came out. Kâ'matûk mountain closer top
nyuyâpakimu. (Repeat as above)
came out.

III

Tâwondu yâhânama iyatcom umasĭ, *tâwondu yâhânama iyatcom
Who man here appear, who man here
umasi? Konyi tcoma yañgamu kâkâĭva yulina piâviki yungai
appear? I there horned snake think not him
wonda tciyatcomu mamasimu? (Repeat as above)
here appear?

IV

Tcotcoku yâkimaḷĭ nyu-una, tcotcoku yâkimaḷĭ nyu-una; *va-aki
Black butterflies sing, black butterflies sing; ruins
rsârsânanu yâ-ana ko-onyuñgu marsâvikĭ nyo-onyi yahimu-una.
below marked I that front passing going.
(Repeat as above)

Translation

It was near Kâ'matûk mountain
That this Rattlesnake came forth;
And he saw the low clouds lying
Near the summit of the mountain.

Who is this, who is this?
Is it not Horned Rattlesnake?
Is it not Horned Rattlesnake
Who now appears before us?

The Butterflies are singing;
The Butterflies are singing,
As I go past the foundations
Below, of the ancient house.

TCOKOT NYNĬ, OWL SONG

[By Virsak VÂI-I]

I

Yahalĭ Kâmundak nânâvangu, * moiva hondoniñga kongana
Large Kâ'matûk mountain, many evenings summit
Aupungiohomi kony huñga wuwuĭ nyuinunduk imukai, momoi
reddish I that toward to sing going, many
nyunyui wuwusi namûkimu. (Repeat from beginning; then repeat
songs all meet.
twice from *)

II

Tcokot yâ-âtama muumuka nyuhuna kony kaitcongatci wuwuiny
Owl man far singing I hearing toward
haimiuhuna. * Momoi yo-ofĭ mâmâtama tcupafinga-a amifâĭAuku
going back and forth. Many women top prostitute there come
kayuhinui kainakimu-u. (Repeat as above)
running laughing sounding.

III

Tcokot yofiñgu kokowo|(d) yâ-âtama tcoma sinyĭ wupâviñgi
Owl bird small owl man try me like
tcohikamu ya-ahana kony yudanyi amuAulhângi taimu hano
class feathers I with to make wind there
kokoñganû kâkâmaiwakimu. (Repeat as above)
points ashy.

IV

Auñgihomi rsonañgi *tcomungâsi mamangia nyi-itcoho-ona;
Reddish water you slowly me make drink;
pianyiñgi papaki navahamo kam siyalika wohoirsakal
not I slowly drunk there east toward
himumu|himu-u. (Repeat as above)
wobble run.

Translation

Toward great Kâ'matûk mountain
I go to join the singing,
During the glow of evening.
I meet all the singers there.

Owl is singing in the distance,
I hear him moving back and forth.
Many harlots came here running;
Here came running and came laughing.

Small Owl resembles Tcokot;
The winds rise from Owl's feathers.
With their ashy tips he starts them.
Small Owl is like the Large Owl.

Owl makes me drink the reddish water;
Rapidly intoxicated
I try to walk straight toward the east,
And find my footsteps staggering.

KAKAITCO NYAĬ, QUAIL SONG

[By Sutatki]

I

Kâkâmañgi kakaitcovû kakawoɹa miyanyita. ʌumungali mulivak
Gray quails bunched grouping. Coyote came running
tatai panyuinahimu. (Repeat four times)
above looking.

II

Tcutcunañgi kakaitcova kakawoɹû vâĭʌukai, ʌumungali nyuinâkû
Blue quails bunched ran together, Coyote saw
kakai vanyuĭnahimu-u. (Repeat four times)
sidewise looking.

Translation

The Gray quails were bunched together,
Coyote ran to look upon them.
The Blue quails were bunched together;
Coyote looked sidewise at them.

TATAI NYAĬ, ROADRUNNER SONG

[By A-an Tâɹsaki, Feathers Foam]

I

Tatai, Tatai, sivâlik mâ-âka, Tatai, Tatai, sivâlik mâ-âka
Roadrunner, Roadrunner, bushy head, Roadrunner, Roadrunner, bushy head
kita ʌungañy rsursulu, poi! poi! poi! (Repeat four times)
house round always, poi! poi! poi!

II

Tatun(d)ai, Tatun(da)i piwopûsâ; Tatun(d)ai, Tatun(d)ai, piwopûsâ,
Roadrunners, Roadrunners unattended; Roadrunners, Roadrunners, unattended,
masika hohotcut utciawa. (Repeat four times)
morning lizards he devours.

Translation

Roadrunner with the bushy head
Is always crying, poi! poi!
As he runs around the house.
Poi! poi! poi! around the house.

Here is the lonely Roadrunner;
Here is the lonely Roadrunner.
He eats lizards in the morning;
He eats solitary lizards.

III

Alisi ʌupuñgi wopuikam ꞎtan(d)ai, alisi ʌupuñgi wopuikam
Kind of reddish eyed that Roadrunner, reddish eyed that
ꞎtan(d)ai hinañgu yakawânda tcuñga tcoviny! tcoviny! Alisi
Roadrunner about mistletoe see (imitative) Kind of
ʌupuñgi wopuikam ꞎtan(d)ai. (Repeat four times)
reddish eyed that Roadrunner.

IV

Konyi kamo yañgitâka mumulihimu, konyi kamo yañgitâka
I there hide had running, I there hide
mumulihimu kâmañgi tcosokaꞁi moakai vâkatc ki-ima ho-o. (Repeat
had running gray lizard kill stomach fat eat.
four times)

V

Kaꞁo tcuof koi kuka kcñganû kiâhâsi haopaꞁ mat taꞁ tcoi-ika
Over yonder long mesquite stand tops basket hawk young talon like
koñganû kiâhâsi. (Repeat four times)
tops basket.

VI

Konyi ngamo rsâhika mumulihimu ama aitcovasi nyâĭkuita ama
I there pitiable had running there something lucky there
aitcovasi nyâĭkuita hiyâ vany mosi yun(d)a siviahawa. (Repeat four
something lucky here my vulva in put penis.
times)

VII

Moi yâ-âtama, moi yâ-âtamaka; siʌuñgivia, siʌuñgivia mâ-âtama
Many people, many people; red penis, crown
ikitanyi hiyami nyum(d)a rsotaki vitciwanyu. (Repeat four times)
cut from there water whirlpool.

Translation

Here is the red-eyed Roadrunner;
  Here is the red-eyed Roadrunner,
Who runs about the mistletoe.
  This is the red-eyed Roadrunner.

I run and hide! I run and hide!
  Now I kill the Gray Lizard
And I eat his fat body.
  I run and hide! I run and hide.

Over yonder in the mesquite
  Stands the Hawk's nest with its branches
Which rise like kiâhâ frame sticks,
  Over yonder in the mesquite.

(Translation of sixth and seventh stanzas omitted)

III

Tcokondû ya-ana vamutâm sesivânatco, *tcokondû yana vamutâm
Owl feathers flop headdress, owl feathers flop
sesivânatco; mumukâ tcunyuwuta tanumanu kakatâ namukimu.
headdress; far country top bow made.
(Repeat as above)

IV

Kâkamaki Nahakiâ *hondonyi simamatcima kuhunda mâtaiwonyukai
Gray Mouse evening very know in came out running
tcokangiñga ipoiwa. (Repeat as above)
darkness breath.

V

Vatâ masi, vatâ masi, siâmu, tâny kokopaimu; *vatâ masi,
I guess morning, I guess morning, right I shut; I guess morning,
vatâ masi, siâmu tâny kokopaimu; vatâ masi, vatâ masi, siâmu
I guess morning, right I shut; I guess morning, I guess morning, right
tâny kokopaimu-u. (Repeat as above)
I shut.

Translation

With headdress of owl feathers·
  With headdress of owl feathers,
He comes to my far country;
  He comes bringing hence his bow.

The Gray Mouse came at nightfall;
  The Gray Mouse came at nightfall,
Came running in the darkness;
  Came breathing in the darkness.

I am shut in at day dawn;
  I am shut in at day dawn,
All night I am free to run
  But am shut in at day dawn.

KÂKS NYNĬ, DOG SONG[a]

[By Virsak VÂI-I]

I

Hodony kâ nyunyuĭ rsârsân, *katcĭm tangĭŏ tcut yuwuhu|(t)
Evening at songs commence, laying direction from wind
mundukai vatâ mumuĭnama mundukai vatâ yongĭnyu tcopina wufuĭ
running was terrible running was shaking north toward
nyi pahiva vivohon(d)a.
me tail wind blew over.

Translation

The songs commence at nightfall,
  And the winds blow toward the north.
The winds are blowing strongly,
  Blowing my tail toward the north.

[a] Sung rapidly while the side of a basket is beaten to carry the rhythm.

II

Yâkimalĭ yahanû, *yâkimalĭ yahanû; hiyâ vany nanamana kopalĭ
Butterfly wings, butterfly wings; here I above face
ñguñgursu hama hukâ nyuina nyi ipoĭna sivahamâ tcoĭnga-a. (Repeat
down fall there you see me soul more appearance.
all; then repeat twice from *)

III

Yahalĭ gâñgâs simuliwuka, rsâĭñgalĭ gâñgâs muliwuka, vapukialĭ
Small dogs came running, pitiable dogs came running, riders
mâĭnaka wovakimu haluhumimâkainangu-u.
after came up laughing sounding.

Translation

Butterfly wings are falling;
Butterfly wings are falling,
Falling upon and harming;
My suffering is greater.

See the small dogs come running;
See the poor dogs come running.
See the horsemen coming after;
See the horsemen coming laughing.

PAN NYUĬ, COYOTE SONG

[By Virsak VÂI-I]

I

Panai kukiwaka nyunyuĭ rsârsânutcona-a. (Repeat) *Tcovañga
Coyote stands songs commence. Girl at puberty
mohofĭ yâĭkapĭ worsanyimu Panai nyunyuĭ vaʌunahimu. (Repeat
woman hurry came Coyote songs stretching.
all; then repeat twice from *)

II

Pahañgu yahanû, *Pahañgu yahanû komus huku vany vânam
Eagle feathers, Eagle feathers you that that my hat
hatcona-a, komus huku vany vânam hatcona-a vahamâ tcoĭkama, nyi
made, you that that my hat made more looks, me
imoitakû vahamâ tcoiñga.
heart more looks.

Translation

Coyote commences singing;
Coyote commences singing.
The young woman hurries forth
To hear the Coyote songs.

A hat of eagle feathers;
A hat of eagle feathers,
A headdress was made for me
That made my heart grow stronger.

III

Sikâlĭ rsonukama, *sikalĭ rsonukama; kuɹañgu Panai sitcunakimu
Around water, around water; there in Coyote blue
maniasina konyuñga wuwui vâpâĭmuna. (Repeat as above)
dyed I in toward run.

Translation

Coyote ran around it;
Coyote ran around it,
Ran into the blue water,
Changed the color of his hair.

HOAI NYUĬ, BLACK-TAILED DEER SONG

[By Ki-iwa]

I

Vavaki yuwuɹa, vavaki yuwuɹa; *konyuka wutcâma yukahimuna,
Ruins windy, ruins windy; I that under put in the shade of
wutcâma yukahimuna; kuñgu nyahañga yuwuɹuna, kunyu
under put in the shade of; large horns windy, that
nahanaka yuwuduna. (Repeat; then repeat twice from *)
my ears windy.

II

Hamâ muɹa nyoñgitcu, hamâ muɹa nyoñgitcu; kungamâtcomu
Over there run shaking, over there run shaking; ahead
vâpâĭmuhu *kaho nyâĭnak kañgatâ tâtânulihi kaiya mukâ nyaĭhinuna.
run many up after bows shining here far me reach.
(Repeat as above)

Translation

Down from the houses of magic;
Down from the houses of magic,
Blow the winds and from my antlers,
And my ears they stronger gather.

Over there I ran trembling;
Over there I ran trembling,
For bows and arrows pursued me.
Many bows were on my trail.

III

Tâwonꞡu kaviyo, tâwonꞡu kaviyo; hiya mukâva puny namukimuna
What horse, what horse; here far in meet me
hami nyâĭna, hami nyâĭna, siyonyoena, siyonyoena; rsahavasi
there after, there after, trying to catch up, trying to catch up; how
inamangia himu kunyĭ yaĭhimuna. (Repeat)
slowly going I reaching.
*Ho-o koakam kaviyo hiya mukâva puny namukimuna hami
Star forehead horse here far me meeting me there
nyâĭna, hami nyâĭna, siyonyoena, siyonyoena; rsahavasi
after, there after, trying to catch up, trying to catch up; how
mamañgia himu kunyĭyaihimuna. (Repeat from *)
slowly going reaching me.

IV

Atcĭmtcia pâkaĭtcuna, yatcĭmtcia pâkaĭtcuna. (Repeat)
We here sit, we here sit.
Siyalĭkâ vavanyima nyunyuĭ kotcungu wus am yanga, yatcĭmtcia
East direction there songs we are all there sing, we here
pâkaĭtcuna. Hondonyikâ vavanyima nyunyuĭ kotcungu wus am
sit. West direction there songs we are all there
yanga, yatcĭmtcia pâkaĭtcuna.
sing, we here sit.

Translation

What horse is trying to catch me?
  What horse is trying to catch me?
The horse with the star forehead
  Now slowly gains upon me.

We are sitting here together;
  We are sitting here together,
Singing the song of the east,
  Singing the song of the west.

TCOTOM NYAĬ, BEAR SONG[a]

[By Virsak VÂI-I]

I

Nanyi wonda tcotcoka tcodohom, *hiyâvany tamai kakayu vaopa
Was I black bear, here me top across stretched
sikâdaka himu kamhâ nyuĭta yanakuvia sima hanyu-u. (Repeat all;
around going there see waving dew falling.
then repeat twice from *)

Translation

I am the Black Bear. Around me
  You see the light clouds extending.
I am the Black Bear. Around me
  You see the light dew falling.

[a] Sometimes used as a rain song.

II

Haliwusi ʌuñgihomi rsotañgi *konyama ibyokU; kamo nya imUhai
Kind of reddish water I there drink; there I going
nyUja vamomokimU vany tgisUmUhUnyU-U. (Repeat as above)
me in dead I afraid.

III

NyUnyUĭʌU rsârsâna; *wUwUĭ nya himUna hany nya sikoli nyUnyUĭ
Songs commence; toward I going cry I younger brother songs
simamatcimU-U. (Repeat as above)
know.

Translation

I drink the reddish liquor
Which kills the spirit in me.
I drink the reddish liquor
Which kills the spirit in me.

Now the singing has commenced,
Now the singing has commenced.
I go with my younger brother;
I know the songs we're singing.

TcʌfhÂ NyʌĭĬ, Gopher Song

[By Sutatki]

I

Hon(d)ony siʌUpUñgiomi kony âinatca ihimUna-a; itanyimoina
Evening reddish I after go; this my many
ʌUpUñgiomi ivasi yâsimUna-a wUwUĭ nyokai ʌapañganyi nyUwUn(d)U
reddish makes flowers toward go holes land
yaihimUna. (Repeat four times)
reaching.

II

Pahangu matcUwUĭna ngĭngĭkâva yUwUn(d)a, pahangU matcUwUĭna
Eagle's wing feathers four windy, eagle's wing feathers
ngĭngĭkâva yUwUn(d)a; yakâvany woa kâviki nyUina tânâlĭñga
four windy; here me turn to see shining
nyimoĭ kayUkayâmĭna. (Repeat four times)
soul crossed.

Translation

In the reddish glow of nightfall,
In the reddish glow of nightfall
I return to my burrow,
About which the flowers bloom.

With the four eagle feathers,
With the four eagle feathers
I stir the air. When I turn
My magic power is crossed.

III

Tcuwunda nyi moata-a, mâĭkaʌa tcuwunda nyi moata-a; maikawa
Land my hill, soft land my hill; soft
moñginanu tânâlĭñga himoiwehimu kamo ndanyi maitcomi rsâhĭñga
in front of shining exhale there me before pitiable
tcohĭñgaimu-u. (Repeat four times)
appearance.

Translation

And I make hills of soft earth;
And I make hills of soft earth.
My breath withers all before it;
My breath withers all before it.

Kâvi Nyoĭ, Beaver Song

[By Sutatki]

upinyi; moi ʌuvapamandu
afraid; many snakes
ul ha himuhuna. (Repeat
going.

vapi yâivikia himu kunyĭ
you not quick go I
rsanyĭmhu api mamarsâka
growing there tame
ki poĭ i muʌi (r four times)
breath windy.

III

Sikolĭ, tanyĭ kâvi, tanyĭ kâvi; humus Alitcoikatcĭ nabaka, hanâvany
Younger brother, I beaver, I beaver; humus! Appearance ear, there I
wungañyĭ, yo-osa kiyolhimu hanâvany wuñganyi; yo-osa kopalt
round, trees biting there I round; trees face down
anâwihimuna-a. (Repeat four times)
overthrown.

Translation

You talk about and fear me;
You talk about and fear me.
As like the sinuous snake
I go upon the water.

I see that you go slowly;
I see that you go slowly.
Strong as the Sun among the trees,
You leave your mark upon them.

Younger brother, I am Beaver,
I am the quick-eared Beaver
That gnaws the trees of the forest,
'Tis I who overthrow them.

KAF(Ů) NYUĬ, BADGER SONG

[By Sutatki]

I

Vanyi rsâika vanyUnyUi pimamatcima; *tarsai vayon(d)onyU,
I pitiable those songs not know; sun set,
nyUnyUi pimatcivaiyañga. (Repeat; then repeat twice from *. Sing
songs not know sing.
thus four times)

II

Tarsai yon(d)onyikon(d)a nyUnyUwUn(d)a, tarsai yon(d)onyikon(d)a
Sun sets land, sun sets
nyUnyUwUn(d)a; am miyUn(d)añga *kUsUkâmañgi tcokon(d)a
land; there in there kind of gray owl
nyinyivimU hanâ vany wUñganyi nyongorsa-ali kohota itala
came address there me around low hooting this
nyimoinañga kayovaiya pUihimU. (Repeat as above)
my heart higher lifting.

III

Kan(d)oñga nyʌmUn(d)a siʌapawany, konyUñgU âinaka imUna
There land sleeping, I there after going
tânâlingU kakavitci vavanha, hayanyi! Maman(d)a vamiñgi
shining narrow stretch, haya! My young you
rsâĭnganhi tcomali kopânyU. (Repeat eight times)
pitiable making dust.

IV

Tarsaiñgamu kavai *kahova yon(d)ony tatañiâ kUkiwakU yaitco
Sun there up there up there west direction stand something
tcomU nyañi kUwUsi tânUnâmU rsavikon(d)a hon(d)onyi tatañiâ
there tell kind of shining gourd rattle west direction
ʌukainakimU. (Repeat; then repeat twice from *. Sing all four
sounding.
times)

Translation

Here am I unfortunate;
  Here am I unfortunate,
Not to know the songs to sing;
  The songs we sing at sunset.

There came a Gray Owl at sunset,
  There came a Gray Owl at sunset
Hooting softly around me,
  He brought terror to my heart.

The land lay quietly sleeping;
  The land lay quietly sleeping.
My young stretch, crying, haya!
  Pity them digging in the dust.

You Sun out there in the West;
  You Sun out there in the West,
You now are talking to me.
  You are sounding your gourd rattle.

V

Tcuwun(d)a muihimu, tcuwun(d)a muihimu; konyika yuła tcoma
Land burning, land burning; I in there
worsanyĭmu, konyu yuła hapânyunâhungu hanâvany ʌunganyitc(ĭ)
rise go, I in there I looking around me behind me
nyuinâhâñgu hanavata vunganyĭ tcuwun(d)a kakavitc tcama
looking many around land narrow there
tcunâkimu. (Repeat eight times)
green.

VI

Vanyu pĭnyi mamatcuka vamâ nyiwahana, *vanyu pĭnyi
I not know surely more I make, I not
mamatcuka vamâ nyiwahana; kusi tcupafi kama anyitaka
know surely more I make; very prostitute hold feel
siâmanyi mamukaha kony hunga imoitaka tcama yon(d)onyiñga
right give I that take in there west
wuwuĭ tcutcumâ. (Repeat; then repeat from *. Sing all four
toward reached.
times)

VII

Vikamu Ñakân(d)ak nyoñinanu movinyama yukaimuna *vikamu,
Remaining Crooked mountain me before pointed shadow remaining,
Ñgakân(d)aku nyoñinanu ñañakâli yukaimuna kuła ña nyunyui
Crooked mountain, me before curved shadow in songs
ʌukaivâ nakimu rsâĭkala nyimoitañga tcupafi tcona. (Repeat; then
sound pitiable my heart prostitute. (?)
repeat from *. Sing four times)

VIII

Kakaitcoʌu yahala hon(d)onyĭnga vungioma makû natâĭmhu
Quails small evening glow arrive make
hapâvĭñĭ nyonyopitci nyunyukamu tcokañgiñgu tangiomakai
there slowly fly darkness stripped
mâmânamu tañitâĭmu. (Repeat eight times)
crown throw on.

Translation

The land is parched and burning,
  The land is parched and burning.
Going and looking about me
  I see a narrow strip of green.

Yet I do not know surely,
  Yet I do not know surely.
The harlot is here among us.
  I go away toward the west.

The shadow of Crooked mountain,
  The curved and pointed shadow.
'Twas there that I heard the singing;
  Heard the songs that harmed my heart.

The light glow of evening;
  The light glow of evening
Comes as the quails fly slowly,
  And it settles on the young.

WEHÂM NYOÏ, LIGHTNING SONG

[By SUTATKI]

I

Weyâma himUnatcia himUnania kaiyam kaiyany, sikolĭ, mUmUkâ
Weham went going listen here, younger brother far
yohosi mumoahi [tataka sitana-a]. (Sing four times, alternating the
tree kill half split.
last two words with the one preceding)

II

Rsâĭ kanya sikolĭ kamo nyimUitcoka, kamo nyimUitcoka, hanâ nyi
Pitiable I younger brother there me carry, there me carry, there me
wUwUñgatcĭ tânâvañga tcotcĭm parsâ nyoΔana. (Repeat four times)
around mountain stand near by there carry.

III

ΔUpUñgiomi vapamand tcomaiya weyâmi, tcomaiya weyâmi,
Reddish snakes tries to make lightning, tries to make lightning,
kahova yosi tapa kUkiwopa pivanyi nakâka. (Repeat four times)
there up tree on stand not I do.

IV

Rsâĭ kanya sikolĭ tcokañgi noahimtconakia vâpâhimU vanyU
Pitiable I younger brother darkness roaring going running I
pina-akâk tamai ΔUkahatcimu parsâpU katawa. (Repeat four times)
not do top sky near by shoot.

Translation

See the destructive lightning
Going to kill the distant tree.
It is going, my younger brother,
To split the distant tree.

Around the mountain I carry
My poor younger brother;
Carry him around the mountain
And then I stand before it.

The lightning like reddish snakes
Tries to lash and shiver the trees.
The lightning tries to strike them,
But it fails and they yet stand.

(Translation of fourth stanza omitted)

Hawatd Nyaĭ, Wind Song

[By Ha-ata]

I

Yuwuɲdĭ nyuhuma, *hiyawu rsânahatco, kamo danyimamaitcoma
Wind sing, here commence, there my in front
tcunyuwuta nyonyoahañgu-u. (Repeat all; then repeat twice from *)
land stretching.

II

Yuwuhuld ki-iki mumunaiku, *yuwuhuld ki-iki mumunaiku;
Wind house thunder, wind house thunder;
konyi kamho imuna tcuwunɲa tcutcumâka mumunaiku-u. (Repeat
I there going land covered thunder.
as above)

III

Himo tâtâvaka yuwuhuɲa, *himo tâtâvaka yuwuhuɲa, himo
There mountain windy, there mountain windy, there
tâvâvaka yuwuhuɲa; wusikâ simaihâñgindañgu tciya muliva-a.
mountain windy, all over centipeds here came running.
(Repeat as above)

IV

Tcotcok vapamanda huwuling *tcotcok vapamanda huwuling;
Black snake wind, black snake wind;
ñgai hiyata nyuiyuta muliva kuñgata nyuiyut pimihivi. (Repeat
that here song in came running that song in the around.
as above)

Translation

Wind now commences to sing;
  Wind now commences to sing.
The land stretches before me,
  Before me stretches away.

Wind's house now is thundering;
  Wind's house now is thundering.
I go roaring o'er the land,
  The land covered with thunder.

Over the windy mountains;
  Over the windy mountains,
Came the myriad-legged wind;
  The wind came running hither.

The Black Snake Wind came to me;
  The Black Snake Wind came to me,
Came and wrapped itself about,
  Came here running with its song.

V

Vanyi naiwonyĭm *vasipi muhuk naiwonyuka mi-itco vanyitâ
I am came out cup of water hold came swiftly make drink I
nânaku naiwonyuka sisikâlĭ imunduhuna-a. (Repeat as above)
crazy came swiftly round running.

VI

Tâta yanami ivakimu, tâta yanami ivakimu; kunda nyi mulivukaĭ
White cactus leaves, white cactus leaves; in I came running
rsâĭñgu mumulihi-i. (Repeat as above)
poor running.

Translation

Swiftly with a cup of water
I came running to make you drink.
I make you drink the water
And turn dizzily around.

Among the white cactus leaves;
Among the white cactus leaves,
I came running to that place;
I came running to that place.

KOKPU NYUĬ, FETISH SONG[a]

[By Virsak VÂI-I]

I

Kokopu nyunyui rsârsân, *kokopu nyunyui gando viñgi rsârsân;
Fetish song commence, fetish song there commence;
woivanya imuna piâvat matcimakâ rsârsân, tcokañgi muŋa sigi
toward going not know commence, night in very
konyimuna-a. (Repeat all; then repeat twice from *. Sing four times)
noisy.

II

Kokopu nyunyui tcotcoahimu, *kokopu, nyunyui tcotcoahimu;
Fetish song stood, fetish song stood;
kaiyâk wuwui vâpâ himuŋa sitcupafinga-a. (Repeat as above)
heard toward run going crazy.

Translation

We commence the fetish song;
We commence the fetish song.
It is difficult but I try;
The night grows very noisy.

The fetish song arises;
The fetish song arises.
To it the crazed women run;
To it the crazed women run.

---

[a] Apache hair with the down of birds is placed in a medicine basket where a spirit "developes" that is helpful if food is set out each night for him to eat. If he is neglected he may cause disease, whereupon this song is sung.

III

Rsâĭganywâna, rsâĭganywâna; wusikâĭny nañgioma, rsâĭganywâna,
Poor me, poor me; all over me stripping, poor me,
wusikâĭny nañgioma knyuhuna-a. (Repeat as above)
all over me stripping singing.

IV

Tcokañgi nyuimu|himu, tcokañgi nyuimu|himu; Sivât Tânâfañgu
Night sing going, night sing going; Sievat mountain
wuwui vanyuimulhimu konyhungu wuwui tcomu vapahimu. (Repeat
toward lead me I that toward there running.
as above)

Translation

Pity me! Oh pity me!
And strip away my disease.
Now strip away my disease;
Clear it away by singing.

I'm going to the singing;
I'm going to the singing.
It is leading to the mountain,
Running to Sievat mountain.

NAVITCO NYAĬ, NAVITCO SONG

[By Virsak Vâĭ-I]

I

Tcotculĭk viahâka tcutculuk miaAa tcutculuk miaAa.
Fowl bean sounds drop sounds drop.

II

Kat vavaiworsunyu, kat vavaiworsunyu; sami worsunyihimu
There stone wall arose, there stone wall arose; there arose
sahapâ kainama kohai, sami worsunyu, sami worsunyihimu. (Sing
pleasing sound burn open, there arose, there arose.
once and dance)

Translation

The chicken beans are rattling,
They are rattling as they fall.
The chicken beans are rattling,
They are rattling as they fall.

And the stone wall arose there,
And the stone wall arose there.
When the gourd seed was planted
It made its way through to grow.

MAKAI NYAĬ, MAGICIAN SONG

[By Virsak VÂI-I]

I

Kusi tâhai vasialikuĭ vavahaki kunta nyutâ tciviha-a. (Repeat)
Kind of white morning ruins in I come.
* Hamanyutâ tcivihaku nyipoinaku sisivatu tânâli-i. (Repeat twice
There I came my heart flame shine.
from *; then repeat all twice)

II

Yahanu vapakosi tatamanhu ihihamu vâyonyu-u. (Repeat)
Feathers mat-like topmost business singing.
* Tamai kukukimhu nyipoinaku sisivâtu tânâli-i. (Repeat as above)
There go slowly my heart flame shine.

III

Haliauta sihuñgia wowosaiku tcutcuwutu, tamhaiau imukai huñga
That our older brother first came out to walk lands, topmost go that
tâsi vahomâ hiyava tcohinyu-u. (Repeat)
very more here looks.
* Tcutcuwuta tamhaiva himukai tânâlika nyimoitangu hiyaau
Land topmost go shining my heart here
vamhonyu-u. (Repeat as above)
more.

IV

Tcuwuntu makahi * tcuwuntu makahi; wumatci papamo wuwumia
Land magician, land magician; with angry with
himukai vavakia sihainyiñgi tco-o. (Repeat as above)
go ruins wasted make.

Translation

At early dawn I entered,
  Entered in the white light of day.
And my heart flamed with power
  As I entered the magic house.

In the lofty feather house
  His magic is increasing,
And he moves very slowly
  With the power in his heart.

Elder Brother first came forth;
  Elder Brother first came forth,
And with his shining power
  Governed over all the land.

Earth Magician became angry;
  Earth Magician became angry,
And with his magic power
  He destroyed all the houses.

V

Sitcokai vamanʇatco, * sitcokai vamanʇatco, hukanyi vavaki
Black snake made, black snake made, with I ruins
wopona-a. (Repeat as above)
tie.

VI

Sitahai vamanʇatco * hukatci vavaki wopona-a.
White snake made with it ruins tie.
Kosinanumuinaka worsanyu. (Repeat as above)
That fears me go out.

Translation

With a Black Snake I tie them;
With a Black Snake I tie them,
The houses with a Black Snake,
The houses with a Black Snake.

With a White Snake I tie them;
With a White Snake I tie them,
The houses with a White Snake,
The houses with a White Snake.

VIKITA NYAÏ, DOWN SONG [a]

[By Vitsak Vâl-i]

I

Moadañgi tamai monoi tcuvañgi tcotco. (Repeat)
Mo'hatûk top many clouds stand.
Moandañgi tamai momoi ikomu worsa. (Repeat)
Mo'hatûk top many fog arose.
Hami tamai tcotco hoho.
There top stand.

II

Hiatât vinâk sivai yuwuʇa. * Hiatât vinâk sivai yuwuʇa; momoi
Here we flood bitter wind. Here we flood bitter wind; many
gañgatâ nyuitco, momoi gañgatâ nyuitco hoho. (Repeat all; then
bows singing to, many bows singing to.
repeat twice from *)

Translation

On the top of Mo'hatûk
There are many clouds standing.
On the top of Mo'hatûk
Many fog clouds are rising.

The bitter wind blows on us;
The bitter wind blows on us,
As we sing with many bows.

---

[a] Vipinyim Hanyui, North People song. In the treatment of some swellings upon the body the vipinyim songs are sung by a number of men, who at the same time perform a simple ceremony intended to assist in the cure of the patient. Retiring to a structure temporarily erected from poles and sleeping mats, the participants, not necessarily medicine-men, make a number of images of animals and edible plants, which they take, one at a time, to the patient, and allow him to touch. After he has touched the object carried by each man in the party of singers they retire to get a second supply. This is repeated a number of times until the cure is supposed to have been completed.

III

Nanyi wot navitcho komsap naka tamaikatcĭm mâkahap
I am Navitco you talk about laying through put head
mUlitcota navitcho kahatc mUlitco hoho. (Repeat as above)
run Navitco like run.

IV

Yo-osa ikomiakahi, *yo-osa ikomiakahi, yo-osa ikomiakahi rusUrsU[
Sticks cut, sticks cut, sticks cut straight
tcotamhU. (Repeat as above, dancing)

Translation

Though I am a Navitco,
I hear you talk about me.
I thrust my head through the sky
And with it I run away.

Cut sticks, cut sticks, cut sticks straight.

NYAVOLT NYAÏ, DEMON SONG

[By Virsak VÂI-I]

I

Kâmundak nâvañga kUnda kamomoi nyUnyUi kaihima, *Kâmundak
Kâ'matûk mountain in many songs listen, Kâ'matûk
nâvañga kUnda kamomoi nyUnyUi kaihima; kUnda nyi mUliAakU
mountain in many songs listen; in I came running
yakaimU mUdaAU rsarsavaikU. (Repeat all; then repeat twice from *.
sang within echoed.
Sing four times)

II

Hodonyisi miamUnda mUrsârsâna, *hodonyisi miamUnda mUrsârsâna;
Evening close to foundations, evening close to foundations;
kUnda kanyUnyawo[d anyUyapaka hiya avâĭvaka nyimoina
in demons appeared here came running my soul
kunangiomahimU. (Repeat as above)
stripped.

Translation

Singing at Kâ'matûk mountain;
Singing at Kâ'matûk mountain,
I listen to their singing;
I come running to sing with them.

Evening now is falling;
Evening now is falling,
And demons appeared running
To strip and expose my soul.

III

Tcuvai Tânâvañga muna nyunyu kaimu, *Tcuvai Tânâvañga muna
Tcuva Toak mountain in hole, Tcuva Toak mountain in
nyunyu; kaimukunda nyunyukaimu, kunda nyhivaka nyuta, kunda
hole; in hole in in I enter see, in
kanyunyawoɪ(d) aimohiva. (Repeat as above)
demons breath out.

IV

Nyunyawoɪ(d) iyahala, *hiya vâïʌukahi, huʌusyasingam nyu
Demons boys, here came running, many flowers me
rsa-akima kukimu kamo mumukâ kaʌuka tcunyuɪunda huku namanha
grasp standing there far hard land that top
nyoʌapimu nyimoitañgu yovaiya puihimu. (Repeat as above)
bring me to my heart lift higher.

Translation

In a Santa Rita cave;
In a Santa Rita cave,
As I entered in the cave,
I saw the breath of demons.

Here demon boys came running;
Here demon boys came running,
Grasping my hair they carried me,
Brought me to a distant land.

WOAKA NYƆÏ, PUBERTY SONG

[By Virsak Vâï-ï]

I

Âika piworsanymhu, âika piworsanymhu; *hukia tovatcoma
Hurry come out, hurry come out; already became
yondohonyu katcokañi rsarsavaikimu. (Repeat; then repeat from *.
go down that night echoing.
Sing all four times)

II

Tcovak mohof(i), *tcovak mohof(i); kâsiñgu pivayu rsumatcona
Virgin woman, virgin woman; sleepy not indifferent
hamukai nyunarsuna-a hamukai, nyunarsuna-a tcokañgïk yâïtaimu.
there wake there, wake night think about.
(Repeat all; then repeat from *)

Translation

Come hurry forth, hurry forth.
Already the echoing sounds
Of darkness are heard around.

The Virgin is not sleepy,
She is wakeful through the night.

III

Harsany yâmainañgu, * harsany yamainañgu; kadomia woissimu
Giant cactus broken, giant cactus broken; there piled
kudañgu nahana miawoitañgu wuvutcimu yovaiya mumuhuk
in there feathers drop laying raise higher
Mâtcipant yaihi. (Repeat as above)
Ma-atcpat close to.

IV

Hali puñgu kâvânyuk vany puitcokimu itali yoof(i) kakayaku
Small that rumbling I carrying this woman heard
vapikâkârsâ itany tâtaḷan kokokana hotc hairsa, hairsa.
they not sleep this on feet there points nail broke, broke.

V

Tcokañgi mamahanga woisi, tcokañgi mamahañga woisi; konyi
Night branch thrown down, night branch thrown down, I
suka wutcâ miñgi worsa, konyisuka wutcâ miñgi worsa nyahanu
in under there gone past, I in under there gone past my feathers
maikomia.
cut off.

Translation

The Saguaro lies there broken;
And my fallen feathers rise
O'er the top of Table mountain.

The boy stirred the rumbling stones;
The woman heard and could not sleep.
And my toe nails are broken.

The branches of darkness fell,
Cutting my feathers as I passed.

RAIN SONGS

HOAHIHIĈF

[By KA'mâl tkâk]

I

Hi-ihiyanaiho-o; *Nyunyuĭ rsânatcona, hanyunyui rsânatcona;
(?) Song commence, our song commence;
havatumâhâinamû rsânatcota, hitciya yahina-a. (Repeat from *)
pleasing commence, (?) (?)
Hañgunñgunda onyŏĭ nyuitcota, vatumâhâinamû rsânatcota, hitciya
Large corn singing to, pleasing commence, (?)
yahina-a. Hiya-ala onyŏĭ nyuitcota; vatumâhâinamu rsânatcota;
(?) Small corn singing to; pleasing commence;
hitciya yahina-a.
(?) (?)

Translation

Hi-ihiya naiho-o! Let us begin our song,
Let us begin, rejoicing. Hitciya yahina-a.
Let us begin our song, let us begin, rejoicing,
Singing of the large corn. Hitciya yahina-a.
Singing of the small corn. Hitciya yahina-a.

II

Hi-ihiyanaiho-o, tcunoñi hononyïña kusimû kûdavat iañgûta
(?) blue evening drops in there ceremonial sticks
nyuïtco, yahaiva monananka ñiñivâi kuna-a, hitciya yahina.
sing to, all around tassels waving there, (?) (?)
Tâhaiva sia-aliña kukiva kudavat iañgûta nyuïtco, yahaiva
White dawn rises there ceremonial sticks sing to, all around
monanaka ñiñivâï kuna-a, hitciya yahina-a. Tcutâñi hononyïña
tassels waving there, (?) (?) Blue evening
kusimû kudavat iañgûta nyuïtco, yo-onyöï mondanaka ñiñivâi
drops in there ceremonial sticks sing to, corn tassels waving
kuna-a, hitciya yahina. Tâhaïva sia-aliña kukiva kudavat iañgûta
there (?) (?) White dawn rises there ceremonial sticks
nyuïtco, ya-ali yahaka ñiñivâi kuna-a, hitciya yahina-a.
sing to, squash leaves waving there, (?) (?)

III[a]

Hi-ihiyanaiho-o, *tcuwuna mumunai, tcuwuna mumunai; vatciki
(?) earth rumbling, earth rumbling; we are
yoa iwuna; tcuwuna mumunai; wusikâ 1 noahi / 2 nyoko-o hitciya yahina-a.
basket sounding earth rumbling; everywhere 1 humming / 2 raining (?) (?)
(Repeat from *; then repeat all)

Translation

Hi-ihiya naiho-o! The darkness of evening
Falls as we sing before the sacred âmïna.
About us on all sides corn tassels are waving.
Hitciya yahina! The white light of day dawn
Yet finds us singing, while corn tassels are waving.
Hitciya yahina-a! The darkness of evening
Falls as we sing before the sacred âmïna.
About us on all sides corn tassels are waving.
Hitciya yahina! The white light of day dawn
Yet finds us singing, while the squash leaves are waving.

Hi-iya naiho-o! The earth is rumbling
From the beating of our basket drums.
The earth is rumbling from the beating
Of our basket drums, everywhere humming.
Earth is rumbling, everywhere raining.

---

[a]Song not accompanied with dancing.

IV

Hi-ihiyanaiho-o, *Pahangu matcuvwena yopanha, sia-aliñgû
(?) Eagle last wing feathers pull out, east
tañĭo vayolinha guñguña tcuwangimuta-a, hitciya yahina-a. Pahanga
direction point out large clouds there, (?) (?) Eagle
vĭñgĭñga yopanha, hononyñgu tañĭo vayolinha; ya-ala ikomainûka-a,
soft feathers pull out, west direction point out; small clouds there,
hitciya yahina. (Repeat from *) Hamo vakĭ wutco vanoahimu
(?) (?) There house below rumbling
guñguña onyoĭmuta-a, hitciya yahina-a. Hamo vakĭ wutco
large corn there, (?) (?) There house below
vanyokonha, ya-ala onyoĭmuta-a, hitciya yahina.
raining, small corn there, (?) (?)

Translation

Hi-ihiya naiho-o! Pluck out the feathers
From the wing of the Eagle and turn them
Toward the east where lie the large clouds.
Hitciya yahina-a! Pluck out the soft down
From the breast of the Eagle and turn it
Toward the west where sail the small clouds.
Hitciya yahina! Beneath the abode
Of the rain gods it is thundering;
Large corn is there. Hitciya yahina!
Beneath the abode of the rain gods
It is raining; small corn is there.

Ho-onyi Nyni, Corn Song[a]

[By Kâ'mâl tkâk]

I

Hi-i-lo-o ya-a-a. Tâ-âma wus sinyuĭna yali kak aonyoĭ vworsanyu
(?) (?) Who all seeing that two corn standing
tâ-âma wus sinyuĭna siko-oholĭ, hi-ilo-o ya-a-a. Tâ-âma wus sinyuĭna
who all seeing younger brother, (?) (?) Who all seeing
yalĭ kâk alĭ worsanyu; tâ-âma wus sinyuĭna siko-oholĭ, hi-ilo-o ya-a-a.
that two squash standing; who all seeing younger brother, (?) (?)
Ta-atûkam hutama onyoĭ vworsanyu, tâ-âma wus sinyuĭna siko-oholĭ,
Ta-atûkam that top corn standing, who all seeing younger brother,
hi-ilo-o ya-a-a. Ta-atûkam huta-ama ali vworsanyu tâ-âma wus
(?) (?) Ta-atûkam that top squash standing who all
sinyuĭna, siko-oholi, hi-ilo-o ya-a-a. (Ended by singing hi-ilo-o
seeing younger brother, (?) (?)
woihu)

Translation

Hi-ilo-o ya-a-a! He who sees everything
Sees the two stalks of corn standing;
He's my younger brother. Hi-ilo-o ya-a-a!
He who sees everything, sees the two squashes;
He's my younger brother. Hi-ilo-o ya-a-a!
On the summit of Ta-atûkam sees the corn standing;
He's my younger brother. Hi-ilo-o ya-a-a!
On the summit of Ta-atûkam sees the squash standing;
He's my younger brother. Hi-ilo-o woiha!

[a] The first songs ever sung to bring rain. Ho-onyi was the name of the Corn god who left the Pimas for many years and then returned to live at the mountain north of Picacho, Ta-atûkam, whence he sang as above.

II

Hi-ilo-o ya-a-a. Ta-atûkam hu tânâvañgu tatamana tcuvwakĭ
(?) (?) Ta-atûkam that mountain topmost clouds
rsaika-a amâñus sikai-ĭtamu toahimu, hi-ilo-o ya-a-a. Ta-atûkam hu
suspended there makes very loud rumbling, (?) (?) Ta-atûkam that
tânâvangû tatamana hikom hu rsaika-a, amâñus sikai-ĭtama tcokona,
mountain top above clouds that suspended, there makes very loud raining,
hi-ilo-o ya-a-a. Tcu-unañgi huvwatcona tcuwaki yokanyĭ sanâvwu
(?) (?) Blue bluebird clouds holding there
rsaika-a amâñus sikaĭtamu toahimu, hi-ilo-o ya-a-a. Sâ-â-ham[a] hu
suspended there makes very loud rumbling, (?) (?) Yellow that
vanyokoña hikom ha yokanyĭ sanâvwu rsaĭka-a, amâñus sikaitama
bird clouds that holding there suspended, there makes very loud
tcokona, hi-ilo-o ya-a-a.
raining, (?) (?)

III

Hi-ilo-o ya-a-a. I-itâi vahimo'ĭna huwunduka kahoñu; Ta-atûkam
(?) (?) Elder Brother breathe out wind over there; Ta-atûkam
hu ta-ama tcuwakĭ vo-orsa vasitumâhâĭtamu toahimu, hi-ilo ya-a-a.
that above clouds very pleasant to appear rumbling, (?) (?)
I-itâi vahimoĭna huwunduka kahoñu; Ta-atûkam hu ta-amu hikomu
Elder Brother breathe out wind over there; Ta-atûkam that above clouds
rsaika vasitumahâĭtama tcokona, hi-ilo-o ya-a-a. Hami yuna, sami
suspended pleasant appear raining, (?) (?) There in, there
yutda, hamanyĭ yolihina kanyu-u vasitumahâĭta-amu toahimu, hi-ilo-o
in, there me stay sing very pleasant appears rumbling, (?)
ya-a-a. Hami yuna, sami yutda, hamanyi yolihina kanyu-u vasitu-
(?) There in, there in, there me stay sing pleasant
mahaita-ama tcokona, hi-ilo-o ya-a-a. (hi-ilo-o woihu)
to hear again raining, (?) (?)

Translation

Hi-ilo-o ya-a-a! Over Ta-atûkam
Rise the clouds with their loud thundering.
Hi-ilo-o ya-a-a! Over Ta-atûkam
Rise the clouds with their loud raining.
Hi-ilo-o ya-a-a! The Bluebird is holding
In his talons the clouds that are thundering.
Hi-ilo-o ya-a-a! Yellowbird is holding
In his talons the clouds that are raining.

Hi-ilo-o ya-a-a! See Elder Brother
Breathe out the winds that over Ta-atûkam
Drive the clouds with their loud thundering.
Hi-ilo-o ya-a-a! See Elder Brother
Breathe out the winds that over Ta-atûkam
The welcome storm clouds are suspending.
Hi-ilo-o ya-a-a! In the great rain clouds
Let me sing my song of rejoicing.

---

[a] Sâ-â-ham from Sâ-am, is a Sonora Papago word.

WAR SONGS

Rsaɪ Nyaĭ, Straight Song[a]

[By Virsak Vâi-i]

I

Hihi tcotcok âiyañgama nyʊnyʊwʊnda tama nʊmʊlva aihivaihi
That black sandy land top came running (?)
vʊtañgʊvi. (Repeat)
(?)

Tama nʊmʊlva aihivaihi vʊtañgʊvi. (Repeat)
Top came running (?) (?)

II

Hihi himtco himtco, himtco, vitco tañgʊvi himtco, vitco tañgʊvi.
That shove shove, shove, (?) (?) shove, (?) (?)
(Repeat)

Liho liho li yawoine sikyo yawoine sikyo apiatama sikyo tañgʊvi
(?) (?) (?) (?) (?) (?) (?) you also (?) (?)
apiatama sikyo tañgʊvi. (Repeat)
(?) (?) (?)

III

Hana okolrsanihi maoli kiyan tañgʊyi. (Repeat)
On (?) (?) (?) (?)

Tâkiwoɹa nyihâli moakahi hopama ʊ|kâna sitana mâĭkana rsene
That was slave killed skin empty strip off stretch soften (?)
rsolihiye tañgʊvi. (Repeat)
(?) (?)

Translation

Over that black sandy land,
Over the top came running,
Over the top came running.
The Apache slave was killed
And his hide tanned for leather.

---

[a] Sung on returning victorious from war. The singers dance and shake gourd rattles. This is believed to be a very old song original with the Pimas.

WOLUTÂ NYAÎ, THE SONG[a]

[By Virsak Vâl-i]

I

Tânâhâli vavanyimhu yanama hiyava tcimyivia hiyava nyinyivia
Shining row man here came here came
kanyhuina tcokangiku yatâny yahatcimu. (Repeat four times)
see darkness here me collected.

II

Panai yahaɟi kavahanda kikitaka kunda tcomu narsawopimu vanyu
Coyote young shield house in there sat I am
iñgi sâhâi mundatcoma ihinaha kimu. (Repeat four times)
like in there shouting.

III

Panai yahaɟi tcokañgĭ yawolima vuvuikanyi vanyi mulimu kuda
Coyote young darkness tied toward me leading me in
mânyoapa hanâva nyi wukañgi yavatcukia kiñgi kahimuna. (Repeat
brought me there me around cigarettes four departures.
four times)

Mâhyal nâvañga kuka tamai virsaku vanyi ʌumukai munda tcoma
Mahyal mountain standing top hawk here me with in there
putâhâkimu. (Repeat four times)
flop.

Translation

Here the warrior, Shining-row,
Came and saw the night around me.
Young Coyote made a shield house
And he sat in it shouting,
And that was pleasing to me.
Young Coyote tied the darkness;
The cigarettes were passed around,
Four times when he led me there.
The Hawk on Mahyal mountain[b]
Stood with me beating his wings.

---

[a] Sung on return from an Apache campaign at the time when the hair of the enemy is tied by the aged companion appointed for each successful warrior.

[b] Mahyal is the Pima name of the mountains about Silver King.

MÂ-ÂT'K' NYUĬ, SCALP SONG[a]

[By Virsak VÂI-I]

I

Siyaliñgû tangio yâtamû taiwonyu, *sivaliñgû tangio yâtamû
East direction man arose, east direction man
taiwonyu; kuhuwusi yâsĭkamû nyâvatcuki vany nanamu komâ
arose; kind of flowers cigarettes I meet there
hâkomâ hanyu. (Repeat all; then repeat twice from *)
smoking.

II

Navamoku nyaka, navamoku nyakatci, ñgamova mukâ munduhuna.
Drunk false said, drunk me about said, there far running.
(Repeat)
*Rsâĭñgal anyimoinañga wuwumu navamo Kakândaku nânhâvañgu
Pitiful my soul with drunk Crooked mountain
yaihimu. (Repeat twice from *)
moving toward.

III

Kamo nya himuna, *kamo nya himuna; kusi auñgiomi nâvaita
There I go, there I go; kind of reddish liquor
nyitcona pia nyiki navamok rsakalâĭ mumuhulimu. (Repeat twice
I caused to drink not me drunk stagger run.
from *)

IV

Yâhându kavinyĭk, *yâhându kavinyĭk; kunda ɫgalĭ nyohonyoiau
Sandy hill, sandy hill; in kind of vulture
taiwonyuk hanâ vany wukany tcuwut ɣamu tânâhâlĭ. (Repeat all;
come out running there my around land on shining.
then repeat twice from *)

Translation

There arose in the East Land
One whom I met there smoking
Flowerlike cigarettes.

Running dazed and falsely speaking
Pitiable and faint-hearted
I feel at Crooked mountain.

There I'm going, there I'm going.
I have to drink the liquor
That makes me stagger as I run.

Vulture arose from Sandy hill
Shining upon the land around.

[a] Accompanied by dancing.

V

Kâkâmaki tâkutât makaiñga tcu, *kâkâmaki tâkutât makaiñga
Gray spider magician find, gray spider magician
tcu; kusi tcopolima kihâta makai nyahañga, haiya, hiya, hiyaka himu.
find; kind of squarely like a kiâhâ magician he said, (?) (?) (?) (?)
(Repeat as above)

VI

Kahova hinakimu *kahova hinakimu; yatciau tâvañga wutcâva
Up there shouting, up there shouting; Atci hill under
hinakimu yâtam hawus am rsâïkâ aukaitcuna. (Repeat as above)
shouting people all there poor said.

Translation

The Gray Spider magician
He made a square kiâhâ.
He is indeed a magician.

They are shouting, they are shouting,
Around the hill of Atci.
The poor people there are shouting
As the news of battle comes.

Koi(d)û Ha-akam Nyaï, (?) Olla Song[a]

[By Sika'teu]

I

Patamahimu, patamahimu, vapi yâïjima tciviahimu nañgusi
Where going, where going, not quick come I guess
yukiyupai mokonama muhiaupâ kama hyova kukimu. Haya
already somewhere die fire like there distant stand, (?)
mailo mane. (Repeat ad lib.)
(?) (?)

II

Namu tâny yavany hitconakï yo-osï kokapu vany naki-hiya.
You do me raven to make tree top me hang.
(Repeat ad lib.)

III

Kanŏñgalï vavai tânun(d)âma yovi naputhiñgi rsaitc unda
Far down rocks shining woman you grass in
yañgitâka mundukai samu tamai pahañgu namuku kakuvihimu.
hide run there top eagle meet whipping.
(Repeat ad lib.)

Translation

Now where is he, where is he,
That he has not already come?
Yes, I fear that he has been killed.

You hung the Raven trophies
On a pole and danced around them.

Amid the rocks of the mountain
The women tried to hide themselves;
But the men ran and killed them.

[a] When the Pimas were victorious the women sang these songs at the moment of hearing the first news from the runners that came in advance of the war party.

Speeches

Set speeches which recited portions of the cosmogonical myth were a feature of many ceremonies and were especially important in the preparation for war. They were slightly adapted for each occasion but their general content remained the same. Highly figurative language is used and in consequence it is extremely difficult to obtain even an approximately correct translation. The free translation offered is the result of many discussions with the older men.

In the ten speeches here given reference is made to the following deities, magicians, etc.:

Elder Brother.	Black, Blue, Red, and White Measuring Worm.	White, Blue, Black, and Yellow Dragonfly.
Earth Doctor.	Lightning Magician.	Yellow Spider.
South Doctor.	Thunder Magician.	Down Roll.
Vulture.	Wind Magician,	Yellow Raven.
Talking Tree.	Foam Magician.	Bluebird.
Sun.	Sinking Magician.	Yellow Bird.
Gray Gopher.	Vakolif Magician.	Mountain.
Black, Blue, and White Mocking-bird.	Vikârskam.	Mocking Bird.
Kuvĭk.	Nasia.	Blue Coyote.
Gray Spider.	Old Woman Magician.	Black Kangaroo Mouse.
Blue Gopher.		Owl.

ELDER BROTHER AS HE RESTORED HIMSELF TO LIFE

You people desired to capture Elder Brother so that you might destroy him. You secured the assistance of Vulture, who made a miniature earth; you saw him at his home engaged in this work. He shaped the mountains, defined the water courses, placed the trees, and in four days completed his task. Mounting the zigzag ladders of his house[a] he flew forth and circled about until he saw Elder Brother. Vulture saw the blue flames issuing from Elder Brother's heart and knew that he was invulnerable. In his turn Elder Brother knew that Vulture wished to kill him and had made the miniature earth for that purpose.

Komtâva Sis Makai spadâ âlitûk tatcoa. Ĭt tcuwuɳ
You were Elder Brother magician ill plan desired. This land
tcukĭtc âĭtkʿ si-ĭmâĭtatcotkʿ am sʿap tcu-umâ-â. Ĭt tâ-âta-ak
placed by him followed very many plans there right covered. This mountains
tcotcoatc âĭtkʿ si-ĭmâĭtatcotkʿ am sʿap ko-okiʿ. Ĭt rsârsânûkam
handiwork followed very many plans there right tips. This springs
rsorsokĭ tâtoatc âĭtkʿ si-ĭmâĭtcotkʿ am sʿap tcu-umâ-â. Ĭt os
water placed followed very many plans there right covered. This tree
ku-ursatc âĭtkʿ si-ĭmâĭtatcotkʿ am sʿap ko-okiʿ. Am ki-ĭkʿhâ tcux
put followed very many plans there right tips. There four times bounce
himĭtcotkʿ am tcoĭkâ kopal hutculwoĭtc. Ka-am katckahimĭtc am
pushed there elsewhere turned down slide. There remains there

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[a] The ruin a few miles south of Tempe.

Elder Brother, as he regained consciousness, rose on hands and feet and swayed unsteadily from side to side. He thought of the world about him and it seemed but a barren waste around him; as he recovered from his bewilderment he saw the true condition of things.

Looking about him he saw a river toward the west along which grew arrow bushes. From these he cut four magic sticks; placing his hand on these he blew cigarette smoke over them, whereupon magic power shone forth from between his fingers. He was much pleased with this and laughed softly to himself. He rubbed his magic bag of buckskin four times with each of the four sticks and then put them in and tied it. He then arose and stamped down all mortal magicians and even ground his own house into the earth. He stamped upon the orator, the warrior, the industrious, and the provident woman, and crushed them down. Then he sank beneath the surface of the earth. He reappeared in the east and made from the point of

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utcukĭta. Kaŋsi-ĭtatakrsk' ivam(pi) am uvwukatc inyunhâk tcum
it life. With his hands raised there around look he
nyuĭ âvapĭ hukam haĭtco kanhastcoĭk. Ĭt wusk' ap tcum
saw not them thing famiΛar. This all that he
umatcĭamahimûk piunakâ. Ĭm hoŋĭnyĭk woĭ ΛâtuvÂ kus tcutakĭ'
it ponder fails. In west toward lay kind of blue
uΛamatûta hokĭt am woĭhyamûk am puĭ vatak os. Am ki-ĭk
snake beside there went to there catch wet tree. There four
hĭkomĭak am uwutcâ toak am sikommo. Kotak tânâlĭkatc am
cut there under placed there conjure. That rays there
maorsatûkĭt siwoΛak towe katcĭm tcuwuŋ tam am kokoΛa. Towe
between the fingers opposite fixed country on there reach. Opposite
katcĭm tcuwuŋ maskâ olt'; towe tcotcĭm tâ-âta-ak Λupukĭomĭtk'
fixed country clear remains; opposite fixed mountains reddish
tcotcoa. Tak hap tcoĭkam tcom nyuĭtok am uta tcorsal ihuhumĭâ.
made and erected. That this thing he saw there in murmur laugh.
Ĭm hoŋĭnyĭk takĭŏ tcut ihimĭtc kus tcok ukâ-âmhaĭΛakĭta. Huk
In west direction from pushed kind of black his haze. That
hukatc itakĭhonûk uta pimaskâ iolĭnûk sa-apĭ' itâ-âtan. Ĭm katcĭm
with strip in invisible hold manner made. In laying
takĭŏ ihimĭtc kus ta-at'kĭ' ukâ-âmhaĭwakĭta huk hukatc isita-akĭhonûk
direction pushed kind of blue his haze that with strip thoroughly
uta pimaskâ iolĭnûk sa-ap itâ-âtan.
in invisible stay hold manner made.

Ĭm sialĭk takĭŏ tcut ihimĭtc kus tântâm ukâhaĭΛakita huk hukutc
In east direction from pushed kind of white his haze that with
sitakĭhonûk uta pimaskâ iolĭnûk sa-ap itâtan. Ĭt tutamu tcut ihotony
strip in invisible hold manner made. This above from down
kus tcutakĭ ukâ-âmhaĭΛakĭta huk hukûtc sita-akĭhonûk uta pimaskâ
kind of blue his haze that with strip in invisible
iolĭnûk sa-ap itâtan. Ĭm hoŋĭnyĭk takĭŏ tcut himĭtc kus tcoak
hold manner made. In sunset direction from pushed kind of black
uΛamatûtak huk hukûtc isiΛotk' natâ. Ĭm katcĭm takĭŏ tcut
his snake that with it tie finish. In laying direction from
ihimitc kus ta-at'kĭ' uΛamatûtak huk hukûtc isivotk' natâ. Ĭm
pushed kind of blue his snake that with it tie finish. In
sialĭk takĭŏ tcut ihimĭtc kus tântân uΛamatutak' huk hukûtc
east direction from pushed kind of white his snake that with

emergence a transparent trail to the place where he had gone down. About the base of his mountains the water began to seep forth; entering, he came out with spirit refreshed. Taking all waters, even those covered with water plants, he dipped his hands in and made downward passes. Touching the large trees he made downward sweeps with his hands. Going to the place where he had killed Eagle he sat down looking like a ghost. A voice from the darkness asked, "Why are you here?" He answered that notwithstanding all that he had done for them the people hated him. Renewing his power four times in the east at the place where the sun rises, he blew his hot breath upon the people, which like a weight held them where they

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isivotk' natâ. Ĭt tutamu tcut ihotĭny kus tcu-utaki uʌamatatûk
tie finish. This above from down kind of blue his snake
huk hukûtc isivotk' natâ. Am ivorsanyuk am siûkuĭrs. Âva
that with tie finish. There arose there stamp on. It was
hupai taha kus makait'kam â-âtam kotak am sikuĭhitcony ata-am
where sitting having powers of magician people that there stamp down then
pai-ĭtc siûkuĭrs. Âva hupai taha kus nyiâkam â-âtam kotak am
further stamp on. It was where sitting kind of orator man that there
sikuĭhitcony ata-am pai-ĭtc si-ikuĭrs. Âva hupai taha kus siakam
stamp down then further stamp on. Then where sitting kind of brave
â-âtam tak am sikuĭhitcony, âvawot iwus taam siûkuĭrs. Âva hupai
man that there stamp down, it was last then stamp down. Then where
tahaku of'ĭ stcopoihitûkam ku of'ĭ stcotcûkitûkam kot huk
sitting kind of woman energetic gathers kind of woman stored that that
hawunatk' am sikuĭhitconyĭtk' am tco-opi'. Am kâmalm miarspahimûk
together there stamp down there sank. There thin cover with earth
sialĭk takĭŏ mâ-âkanyĭk am tcut kus tântâm uʌâkĭta ĭtcu. Kus
east direction eruption there from kind of white his trail put up. Kind of
ku-uku-uĭtam tâ-âta-ak tcotcoatc ursârsân ap vapa-aʌany. Huk wusk
large mountains made and erected its bases there seeping. That all
uta vap'ki'hĭtc hukutc huk uipûtak ivaosĭtahĭm. Rsârsânûkam
in enters and returns with that his soul moisten. Springs
rsorsokĭ tâtoatc haakĭa nanûkâtcoĭkam mămăthăt katcp' ui-ĭntc
water placed many various water plants with it covered
wuo(f)utck huk wusk ut mawopĭtc hukutc huk ui-iputak ivaosĭtahĭm.
lays that all in dips with that his soul wet.
Kus ku-ukutam o-os tcotcoatck' huk wusk ap mawopĭtc hukatc
Kind of large trees made and erected that all there dipped with
huk uiputak ivaosĭtahĭm. ʌataʌa tcumâ-â hukU Pa-ak umoa-akŭt
that his soul wet. Therefore cover at Eagle he kill
woĭtcotk' pitcĭmûk woĭtcotk' napatoʌak vi-ĭtckŭt tcoĭk tcivĭa. Hastco
straight to go around straight to sitting (?) resembles came. What
pŭhimutk' tcivĭak vi-ĭtckŭt tcoik'tc' tcivĭa. Hi-ĭks, nanypĭm akĭt
grasp came (?) resemblance came. Yes, I thus told
spathâlĭtk' tatcoa tcuwu ĭtcukĭ humata tarsa. Ta-am sialĭk woa
think evil desires country for me placed human set. There east toward
ki-ĭk aprsârs, ʌataʌa tcu-umâ-â taʌs tcutcrsatckŭt ki-ĭk ap (m)âĭtam
four renewals, therefore reached sun place of coming up four there groups
kâvâtltk' ki-ĭk ap (m)âĭtam tcutany. Âvaʌŭt kuĭrspakutatc wus kâs
hollow four there groups thud. It was stepping place all over
huwulhâkĭtak wus kâs tcuʌakitak tcŭm pipapak'ĭ huk uta ap
windy all over cloudy not slowly that in there

were. He accompanied the Sun on his journey, traveling along the south border of the trail where there was a fringe of beads, feathers, strings of down, and flowers.[a] He jerked the string holding these so that they fell and made the magicians jump. In the north he saw a trail bordered like the one in the south and overturned it.

On his journey along the Sun's orbit Elder Brother came to Talking Tree. "Why do you come like a ghost?" asked Tree. He replied, "Notwithstanding all I have done for the people they hate me." Tree broke one of its middle branches and cut a notch around it to form a war club and gave it to him. Then Tree broke a branch on the south side and made a bundle of ceremonial sticks from it for him. He saw a trail toward the south and another toward the north bordered with shells, feathers, down, and flowers, which he overturned.

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takuĭrspan utco kotak uta ap siukuĭrs. Âvawot takrspakŭtatc wus
enough result that in there stamp. It was place for hand his all

kâs huvuhâkĭtak wus kâs tcuʌakĭtak tcompipapak'ĭ huk uta apta
over windy all over cloudy if not slowly that in there

takrspam utco kotak uta ap si-ĭtakrs. Am iʌorsanyĭk koiwoa
may put the hand result that in there put his hand. There arose about to throw down

i-ipoĭʌoak koĭwoa itak'tc'kowa paitcok koiwoa i-ipoiwoa koiwa
breath about to throw down shoved further about to throw down breath about to throw down

itakk'tc'kowa. Am pai-ĭtcok koĭwa i-ipoĭwoak koĭwa itakk'tc' koĭwa
shoved. There further about to throw down breath about to throw down shoved about to throw down.

Âvawot iwurs ta-am i-ipoĭwoak koĭwa itakk'tc'kowa. Âvawot uta
It was final there breath about to throw down shoved. It was in

katcĭm vâkĭtatc kotak iâĭ katcĭm takĭŏ vâkĭtatc wus kâs payokatak
main route that follow laying direction route all over necklace

wus kâs nahakiâtak a-an kiatŭta hokĭtûk vi-ĭk kiatŭta hokĭtûk os
all over earrings feathers string side down string edge tree

hiktc'ka hiasĭtastc hokĭtûk kak sivantc koʌatc sikopal woihĭm.
short piece flower stuck on artificial edge that drags jerks face down thrown.

Nanûk'ĭ âĭt takĭŏ vâkĭtatc wus kâs payokatak wus kâs nahakiâtak
North field direction route all over necklaces all over earrings

a-an kiatŭta hokitak vi-ĭk kiatŭta hokĭtuk os hikutc'ka hiâsitastc'
feathers strings edge down strings edge tree short piece flowers stuck on artificial flowers

hokĭtŭk kak sihopanytc.
edge that uproot.

Sitcuxhĭm tcotahĭm. Kahupai taha kus makaĭt'kam â-âtam
Jumping high continue. Where set kind of having powers of magician. man

kak am sitcuxhĭm tcotahĭm. Ʌatava tcu-umââ ku nyiakutam os.
that there jumping high continue. Therefore reach kind of Talking Tree.

Woĭtcotk' pitcĭmûk' woĭtcotk' napatoʌak viĭtckŭt tcoĭk'tc' tcivĭa.
Straight to go around straight to sitting (?) resembles came.

Hastco pŭihĭmutk' tcivĭak viĭtckŭt tcoĭk'tc' tcivĭa. Hi-ĭks, nanypĭm
What grasp came (?) resembles came. Yes, I thus told

akĭt spathâlĭtk' tatcŏa tcuwuʒ ĭtcukĭ humata tarsa. P'ata kaĭtam
think evil desires country for me placed human set. So noise

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[a] "Wood shavings."

Arriving at the drinking place of the Sun he knelt down in the tracks made by the Sun to drink, and saw a dark-blue stone.[a] He left there the arrow-bush ceremonial sticks containing his enemies' power, but retained in his grasp the sticks cut from Talking Tree. Toward the south were strewn necklaces, earrings, feathers, strings of down, and flowers, all of which he jerked and threw face down. Toward the north he threw down the same objects, and as they struck the earth they caused the magicians to jump. Reaching the place where the sun sets he slid down four times before he reached the place where Earth Doctor lived.

"Why do you come looking like a ghost?" asked the god. "Notwithstanding all that I have done for them the people hate me," he answered. By Earth Doctor's order the wind from the west caught him up and carried him far to the east, then brought him back and threw him violently down. . . . The south wind carried him to

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tcUtcUa aΛawŏt Uta kUkam vaokatc tak siâm kioΛlt'katk' ap isi
said it was in standing stalk that right cut around there more
kâmUrspĭtc' avawot kâsĭvoltatc tak ap vanytc'k' kU sialĭk
carry on the rump it was chrysalis that there pluck kind of east
ΛUkĭomĭlĭkatc WUs ka itakĭhonûk ΛUnatk' ap isi kamUrspĭtc' âvawot
dawn all over strip with it there more carry on the rump it was
UlUtatc' kas siâm tcokŭt matsĭk ak'tc' korsâ ĭp' takĭtcony vi-ĭkam
skin how proper owl hook call nape persist shove remainder
ap isi kakâmhaĭtckatat. Ĭm mot katcĭm takĭŏ mamhakatc
there more cut cheek hair. In this direction laying direction branch
tak ap molinûk siâm âmĭna vUpatk' sikapĭtckatk' rsak. Âvawot
that there break right ceremonial like sticks bound hold. It was
Uta katcĭm vâkĭtatc kotak iâĭ katcĭm takĭŏ vâkĭtatc WUs kas
in laying route that follow laying direction route all over
payokatak WUs kas nahakĭâtak a-an kina-atUta hokĭtuk vi-ĭk kiatûta
necklaces all over earrings feathers strings edge down strings
hokĭtûk os hikUtc'ka hiasĭtastc hokĭtuk kak sivantc'koΛatc sikopal
edge tree cut stuck up artificial flow edge that pull by jerking face down
woĭhĭm. Nanûkĭ âĭt takĭŏ Λakitatc WUs kas payokatak WUs kas
lay. North field direction route all over necklaces all over
nahakiâtak a-an kiatŭta hokĭtuk vi-ĭk kiatŭta hokĭtuk os hikĭtc'ka
earrings feathers strings edge down strings edge tree short cut
hiasĭtastc' hokĭtŭk kak sihopanytc' sitcUxhĭm tcotahĭm. Ka hUpai
stuck up artificial flow edge that uproot jumping high continue. Where where
taha kUs nyâkam â-âtam kak am sitcUxhĭm tcotahĭm. ΛataΛa
setting kind of talking man that there jumping high continue. Therefore
tcU-Umâ-â kU tars i-ĭkŭt rsotakĭ' kaot tan woĭkotatc WUs kas
reach kind of sun drinking place water that was knee place for kneeling all over
hUwUlhakĭtak WUs kas tcUΛakĭtak. Tcum pipapakĭ hUk Uta apta
windy all over cloudy. Not slowly that in there
tân woĭm Utco tak Uta ap sitânwoa. Kaot takrspakotatc WUs kas
up knee not put result that in there stamp knee. That was hand hold all over
hUΛUlhâkĭtak WUs kas tcUΛakĭtak. Tcum pipapakĭ' hUk Uta apta
windy all over cloudy. Not slowly that in higher
takrspam Utco tak Uta ap si-ĭtakrs. Am i-ĭtcomalkatk' am i.
may place hand result that in there put hand. There he stooped there drink.

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[a] Square, rough edged; causes consumption if one finds it and does not properly care for it.

the north; the east wind carried him to the west; the wind from the zenith carried him to the sky; all returned to throw him violently down. From his cigarette containing two kinds of roots Earth Doctor blew smoke upon the breast of Elder Brother, whereupon green leaves sprang forth and he gained consciousness. Earth Doctor cleared the ground for a council and then picked up Elder Brother as he would have taken up a child and put him in his house.

Earth Doctor sent Gray Gopher up through the earth to emerge in the east by the white water where lay the eagle tail. He came out by the black water where lay the raven feathers. He came out by the

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Am tcum nyuĭ kuk uta am kuk stcu-utakĭ hâtaĭ tapĭnya. Kot
There he saw that in there stand blue stone smooth. That
huk wutcâ am maorsk am takĭthâ huk Â-âps' kam uâmĭna.
that under there thrust in there relinquish that enemies' power short sticks.
Nyĭâkŭtam os uâmĭna viak huk rsa-ak iâĭ. ÂAawot uta katcĭm
Talking tree short sticks left that grasp he followed. It was in laying
vâkĭtatc kotak iâĭ katcĭm takĭŏ vâkĭtatc wus kas payokatak wus
trail that he follow laying direction trail all over necklaces all
kas nahakiâtak a-an kia-atuta hokĭtak vi-ĭk kiatuta hokĭtvk os
over earrings feathers strings sides down strings edge tree
hiktc'ka hiâsĭtastc' hokĭtvk kak sivanĭtckovatc sikopaı woĭhĭm.
short sticks artificial edge that jerks face down thrown.
Na-ankĭ' âĭt takĭŏ vâkĭtatc' wus kas payokatak wus kas nahakĭâtak
North field direction trail all over necklaces all over earrings
a-an kiatuta hokĭtvk vi-ĭk kiatuta hokĭtvk os hik'tcka hiâsĭtastc'
feathers strings edge down strings edge tree short cut artificial
hokĭtvk kak sihopanytc' sitcuxhĭm tcotahĭm. Kahupaĭ taha kus
edge that uproot jumping high going. Where sitting kind of
siakam â-âtam kak am sitcuxhĭm tcotahĭm. ΛataAa tcu-umâ-â
brave man that there jumping high going. Therefore reach
ku taas hotokot ki-ĭk ap mâĭtam sutapĭonytc katc kotak âĭtk'
kind of sun every other evening four there groups smooth lay that followed
ki-ĭkhâ itapĭonyĭk ĭmho tuautca s'papaki tcu ku sis makaĭ.
four times slides there us under slowly discover kind of older brother magician.
Woitcotk' pitcĭmk' woitcotk' napatoAak vi-ĭtckŭt tcoi-ĭk'tc' tcivĭa.
Straight to go around straight to sit flat (?) resembles came.
Hastco pŭĭhimût'k' tcivĭa, hastco pŭĭhĭmût'k' tcivĭa, hastco pŭĭhĭmŭt'k'
What do you wish to get come, what do you wish to get come, what do you wish to get
tcivĭa, hastco pŭĭhĭmŭt'k' tcivĭak vi-ĭtckŭt tcoĭk'tc' tcivĭa. Hi-ĭks,
come, what do you wish to get came (?) resembles came. Yes,
nanypĭm akĭt spathâlĭtk' tatcoa tcuvuı nytcukĭ humata tarsa p'ata
I thus told think evil desires land for me placed people set he said
kaĭtam tcutcu. Ata-im hoıĭnyĭk takĭŏ tcut âĭtktcut tcivĭa.
noise said. Far in west direction from after came.
Ĭm sialĭk woĭ tcuxhĭmtcotk' sialĭk parsâĭnâtkĭtk' opam tarsowa ĭm
In east toward jumping high east turn back near home set in
katcĭm takĭŏtcŭt âĭtktcut tcivĭa. Na-ankĭ âĭt woĭ tcuxhĭmtcotk'
laying direction from follow came. North field toward jumping high
na-ankĭ' âĭt parsâĭpâtkĭtk' opam tarswoa. Ĭm sialĭk takĭŏtcut
north field turn back near home set. In east direction
âĭtk'tcut tcivĭa. Hoıĭnyĭk woĭ tcuxhĭmtcotk' hoıinyĭk parsâinâtkĭtk'
follow came. West toward jumping high west turned back near
opam tarswoa. Ĭt tamutcut âĭtktcut tcivĭa. Tam atcĭm woĭ
home set. Here above follow came. Top sky toward

blue water where lay the bluebird's feathers. He came out by the yellow water where lay the hawk feathers. He found so many people that he feared they could not be conquered. But he gnawed the magic power of their leader until he weakened it. Then he returned to the council in the nether world, where his power as a magician was recognized, and he was placed on a mat with Elder Brother.

The people were now ready to do whatever Elder Brother desired of them and, like fierce predatory animals or raptorial birds, they poured out of the underworld and fell upon the inhabitants of the upper world, whom they conquered without difficulty. The victors swept

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tcuxhĭmtcotk tam atcĭm parsâinâtkĭtkʿ opam tarswoa haapatavâĭtâ-âta.
bounding top sky turned back near home set done.

An wukatc huk tcuwuɻ itakĭŏmk hastcoprs alĭ wupâtkʿ ikâmûk huk
There around that land stripped resembles young make like hold that

uta am tarswoa. Kawot ku kâkâĭ tax aɻĭtcĭkĭtc[a] pawoĭs tax aɻĭtcĭkĭtc
in there set. That was kind of ghost root cigarette his pawois root cigarette his

kotak ap parsâ i-ĭpûĭhuĭʌoa kota siâm uiʌakitat kavaot kus kâmakĭ
that there near he puffed that right left it was kind of gray

tcufha rsâikatc kotak ap imûk rsârsoâ. Kota am tcopĭnyk am sialĭk
gopher pet that there my cry. That there sank there east

takĭŏ mâ-âkanûk am kus tântâm rso-otakiʿ tcu. Ku Pa-ak pahĭwoa
direction pop out there kind of white water discovered. Kind of Eagle tail

katc am simaĭrsk tcu. Am pai-ĭtc tcopĭnyĭk am mâ-âkanyĭk am kus
lay there covered placed. There further sank there pop out there kind of

tcok rso-otakiʿ tcu. Ku haʌany a-an katc maĭrsk am tcu. Am
black water discovered. Kind of raven feathers lay covered there placed. There

pai-ĭtc tcopĭnyk am mâ-âkanyk am kus tcu-utakĭ rsotakĭ tcu.
further sank there pop out there kind of blue water discovered.

Huʌatcot a-an katc naĭrsk am tcu. Am pai-ĭtc tcopĭnyk am
Bluebird feathers lay covered there placed. There further sank there

mâ-âkanyk am kus soam rso-otakĭ tcu. Ku ʌatcokok a-an katc
pop out there kind of yellow water discovered. Kind of hawk feathers lay

maĭrsk am tcu. Am tcopĭnyk am mâ-âkanyk am ikoatcĭtkʿ am
covered there placed. There sank there pop out there look around there

tcum nyuĭ. Ĭt ʌâkuta katcĭm pipapakĭ hastco katc tcoitcĭm tcoi-ĭk.
he saw. This trail laying not slowly what lay manner thing.

Âvak tcom sitaĭrstc takatkʿ u-ulĭt huk makai. Kota am wukatc
They firmly seated think that magician. That there around

katcĭm na-ankâ tcoi-ĭtckatc sisârspâl ki-ĭkomĭa. Puk am opam
laying all belongings short bite off. Took there home

tcopĭʿ. Ki-ĭk ap mâ-âkanyk makaĭ na-ata tcu-umûk hokĭt an takĭtâ.
sank. Four there pop out magician fire covered beside release.

Sʿmakai-ĭtakam â-âtam vaksĭtkʿ tam tarswoa. Tak uta huk isi
Powerful magician man placed for on set. There in that ready

kuĭrsk kukĭʌak nyuĭ ʌiapâku-ulĭka tcuwuɻâ mututam uʌupâkiʿ o-ofĭk
stamped stood me sons land running like birds

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[a] Aɻĭtcĭkĭtc from Papago.

the property and everything relating to the conquered from the face of the earth.

Consider the magic power which abode with me and which is at your service.

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ta-atam uʌupâkitk' nyuĭnyk tam ap uiaʌak ap piatco tatkĭtcotk' ap
flying like fly on there seize there nothing wrestle there
sutapam puĭ. Am ʌukûtc katcĭm nananûka tcoĭtckatc si-ĭnasĭk
smooth catch. There around laying all belongings gather
s'papakĭ' kaʌolkatk' s'papakĭ' hahâk inyu woa.
slowly bundled slowly revolve me throw down.

Hapkvk humŭs uhitk' tatcoa âʌaot kus ku-uk toakak konta ap puk
You may think desire it was kind of good life I took there took
antaʌaĭoapa.
brought.

OPENING OF RAIN CEREMONY[a]

Explanation

When rain is desired one of the leading men who understands the ceremony will notify the medicine-men, the orator or reciter, and the singer. These agree upon beginning the ceremony at the end of four days. On the third day they send one or more men as criers to announce to the people of the adjoining villages that the ceremony will be held on the morrow.

When all have assembled in the evening the leader calls out the names one by one of the medicine-men, who take their position behind the fire, facing toward the east. Then the names of those who will sing are called. The leading singer sits behind the medicine-men and his assistants place themselves on either side of him and around the fire. Then the orator is named and takes his place with the medicine-men. When the leader announces that it is time for the ceremony to begin, the orator recites the following:

Translation

Is it in this condition that we are sitting here, understanding the advice of our forefathers? There is an unknown house in which lies the magic brand; toward this we point the ceremonial cigarette and smoke, thus acquiring an insight that shall enable us to speak wisely.

When the earth was new it was shaking and rough.[b] As you know, Black Mocking Bird lives in the west. I had considered my relation-

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Nâ	Hums	hapa	tcoĭk[c]	kotcs	huk	utû	tathaktc[c]	haps	ma-atc	
Not	like	this	condition	that	for	in	sitting in	therefore	understand	
haĭtco	a-ak.	Kâvawot	qetai[c]	ki,	huk	uta	amkatc[c]	huk[d]	kotck[c]	
thing	counsel.	It was	(?)	house,	for	in	lays		brand	
vi-itûk.	Oatcĭkĭ[c]	tân	huk	woĭ	amukuk	kotc	hukap	hâwâktc	hap	
remnant.	Cigarette	knee	that	one	standing	that	which	inhaling	therefore	
samatc	haĭtco	ak.	Kota	tcuwuŋ	humoĭ	utcu	amuta	hâĭntc	katc	
know	thing	counsel.	Then	earth	new	was	made in	moving	lay	
amuta	tcŏtcoaktc[c]	katc.	Âva	ĭm	hoŋĭnyĭk	takĭŏ	kus	tcok		
in	inserted and projecting	lay.	As you know	toward	west	direction	kind of	black		
rso-ok	kontak	hap	tcoĭkam	mamatcuk	ap	ĭmûk[e]	rsârsoa	kotap		
mocking bird	I had	therefore	that class visible	guessing		my	weep	because		

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[a] The so-called Tcutc kita, make rain.

[b] It shook because it was wet and spongy at that time, "like the wet bank of the river."

[c] Am=a prefix denoting certainty.

[d] Connective inserted for euphony.

[e] Îmûk="My (brother or other relative)," a form of entreaty.

ship to him and guessed what should be the right manner in which to address him. Because of my entreaty he was disposed to be friendly toward me.

Yes, Black Mocking Bird, if your plans for controlling the earth have failed, go far hence and leave the black wind and the black clouds behind you. Your people will henceforth entreat your assistance from a distance.

When the land was new I knew of a Blue Mocking Bird in the south, and I called on him also for help, and he came. He gave commands to control the hills, mountains, trees, everything. But still the earth continued shaking.

Yes, Blue Mocking Bird, if your plans have failed, go hence and

---

sĭnyhâĭ-ikuĭ-itam utatk' amĭtcût tcivĭa. Ha-akĭa haĭtco ua-aka ĭt
friendly felt from came. Many things his counsel this

tcuwuɫ tcumûk vaopanûk tcuwuɫ tcovitûk ap kuorspahimûk ap
land everywhere stretched land hills on touching on

tâta-ak kokok ap kukuorspahimûk o-os kokok ap kukuorspahimûk
mountain tops on touched trees tops on touched

natâ. Âvak hukutc tcûmsi katcĭkâk ak hap tcumtco. Âva
finish. Then with covering remain fixed deter- mining he made it has since failed. As you know

amuta hâĭntc katc amuta tcotcoaktc katc. Ahu-u, kus tcok rso-ok
in moving lay in inserted and projecting lay. Yes, kind of black mocking bird

vatcĭm piam utcon hukûm tcoĭtcĭk kop varsatc[a] iolĭnhĭ kus tcoĭtcĭk
may try your plan you farther stay kind of black

uhuwulĭk kus tcoĭtcĭk utcuwakîk kâmĭsahi ap kukiovan.
your wind kind of black your clouds carried behind there stand.

Hûk hum humata hupaĭ tcukak[b] apamuk mimhi rsâsoakan kop
That your people some time future my entreaty you

pimaskâ vai-iwumkan p'ata tcu-uk va-arsatc iol(t). Im ka-atcĭm[c]
unseen will help, he said near stay. This laying

takĭŏ kus tatk' rso-ok kontak hap tcoĭkam mamutcĭk ap imûk
direc- tion kind of blue mocking bird I was there- fore I know guessing to my

rsârsoa tap sĭnyhâĭ-ikuĭ-itam utatk' amtcut tcivĭa. Ha-akia haĭtco
weep conse- quently friendly felt from come. Many things

ua-aka it tcuwuɫ tcu-umk vaopanûk tcuwuɫ tcovitk ap
his advice this land covering stretched land hill to

kuowurspahimuk ap tâ-ata-ak ko'kok ap kukuowurspahimûk o-so
touching on mountain tops on touched trees

ap kukuowurspahimûk na-atâ. Âvak hukutc tcomsi katcĭkâk
on touched finish. Then with that for the purpose remain

a-ak hap tcumtco. Âva amuta hâĭntc katc amuta tcotcoaktc'
fixed deter- mining he made it has since failed. As you know in moving lay in inserted and projecting

katc. Ahu-u, kus tatk' rso-ok vatcum piam utcon hukum tcoĭtcĭk
lay. Yes, kind of blue mocking bird your may try your plan

kop varsatc iolĭnhĭ kus tatk' uhuwulĭk kus tatk' utcuwakĭk
farther stay kind of blue your wind kind of blue your clouds

---

[a] Kop varsatc, "farther," when any one is moving toward an object near at hand; "near" when speaking of an object close by if no one is approaching or seeking it.

[b] From Papago.

[c] Speaker here points to the quarter about which he is speaking.

leave the blue wind and blue clouds behind you. Your people will henceforth entreat your assistance from a distance.

Then I knew the White Mocking Bird in the east, and I called on him for help, and he came, bringing commands that would control the hills, mountains, trees, everything. But the earth continued shaking.

Yes, White Mocking Bird, if your plans for controlling the earth have failed, go hence and leave the white winds and the white clouds behind you. Your people will henceforth entreat your assistance from a distance.

Then, above me enveloped in darkness lived the magician Kuvĭk, on whom I called for help. He came in a friendly spirit, with commands that would control the hills, mountains, trees, everything. The earth became much quieter, but still moved somewhat.

---

kamĭrshĭ ap kukĭovan. Huk hum huma-ata hupai tcukak apamuuk
carried behind there stand. That your people some time future

mimhi rsâsoakan kop pimaskâ vaiwumkan p'atatcu-ûk varsatc iol(t).
my entreaty you unseen will help he said farther stay.

Ĭm sialĭk takĭŏ kus tântâm rso-ok kontak hap tcoĭkam mamutcûk
This east direction kind of white mocking bird I was determin-ing I know guessing

apimûk rsâsoa tap' sănyhâĭ-ikuĭ-itam utatk' am tcut tcivĭa. Ha-akĭa
to my weep he friendly felt from come. Many

haĭtco ua-aka ĭt tcuwu tcumk vaopanûk tcuwu tcovitûk ap
things his advice this land covering stretched land hill there

kuowurspahĭmûk tâ-âtak kokok kukuorspahĭmûk o-os kokok ap
touching mountains tops touched trees tops there

kukuorspahĭmûk na-atâ. Âvak hukatc tcŏmsi katckâk a-ak
touched finish. Then with for the purpose remain fixed

hap tcumtco. Âva amuta hâĭntc katc amuta tcotcoaktc
determining he made it has since failed. As you know in moving lay in inserted and projecting

katc. Ahu-u, vatcĭm piam utcon hukûm tcoĭtcĭk kop varsatc iolĭnhĭ
lay. Yes, may try your plant you farther stay

kus tâta uhuwulĭk kus tâta utcuwukĭk kamĭrshĭ ap kukĭovan.
kind of white your wind kind of white your clouds carried behind there stand.

Huk hum humata hupai tcukak apa mu-uk mimhi rsârsoakan
That your people some time from far my entreaty

kop pimaskâ vaĭ-iwumkan. Âva![a] Iat tam huk stcohokam
your unseen assistance. As you know! Here above that darkness

kusikâlk'tc' ka-atc'. Âva! Uta siâmp uolĭntc huk Kuvik kârskam
enveloping there. As you know! In right held that Vi-ik nest

ma-akai. Kontak hap tcoĭkam mamutcĭk ap imûk rsârsoa. Kotap
magician. I was that kind of guessing to my weep. Because

sănghâĭ-ikuĭ-itam utatk' ha-akĭa haĭtco ua-aka rsa-akû' amtcut
friendly felt many things his advice grasping from

tcivĭa. Ha-akĭa haĭtco ua-aka it tcuwu tcumûk vaopanûk tcuwu
come. Many things his advice this land covering stretched land

tcovĭtk ap kuorspahimûk tâtak kokok ap kukuorspahimûk o-os
hill to touching mountain tops to touched trees

kokok ap kukuorspahimuk na-atâk ata hukatc am hu-us tâtâlĭm
tops to touched finish fly with that from little quiet

utcu. Am ha-as ihikâva amuta hâĭntc katc amuta tcotcoak'tc' katc'.
remain. From brief time in moving there in inserted and projecting lay.

---

[a] Âva means "as you know," but is here an interjection.

Then, there was a Gray Spider in the west.[a] I called on him for assistance. He was friendly to me and came in answer to my appeal. He took bundles of sticks, which he placed in the edges of the land and sewed them firmly together. He pulled the black corner at the west, where stands the house of the Rain god of the west. He firmly enveloped the earth with his black power. He pulled the blue corner at the south, where stands the house of the Rain god of the south. He firmly enveloped the earth with his blue power. He pulled the white corner at the east, where stands the house of the Rain god of the east. He firmly enveloped the earth with his white power, and with that the earth became quieter.

Im hoɻinyĭk takĭŏ kus kâmaki tâktât. Kontak hap tcoikam
In sunset direction kind of gray spider. I was that class

mamûtcik ap imûk rsârsoa. Kotap sĭnyhâĭ-ikuĭ-itam utâtk' o-os
guessing to my weep. Because friendly felt trees

uhikĭaka rsa-ak amtcut tcivĭa. It tcuwu ɻ hohokitak sikoapitk'
bundles of sticks grasping from come. This land edges firmly sewed together

natâ. Ĭm hoɻinyĭk woĭ ivanyonûk am kus tcok mawatatûk' kus
finish. In sunset toward pull from kind of black four corners of the earth tied with something kind of

tcok va-akĭ katc am si maitcoyitûk' kus tcotcĭk'k' omû katc
black house with from firmly envelope kind of black two-feathered arrow lay

am si kuowurs. Im ka-atck' woĭ ivanyunak am kus tatk'
from very hold down. In laying toward pull from kind of blue

mawatatûk' kus tatk' va-akĭ katc am si maitconytk' kus
four corners of the earth tied with something kind of blue house lay from firmly envelope kind of

tatk' omû katc am si kuowurs. Im sialĭk woĭ ivanyonûk
blue two-feathered arrow lay from firmly hold down. In east toward pull

am kus tântâm mawatatûk' kus tântâm va-akĭ katc am si
from kind of white four corners of the earth tied with something kind of white house lay from firmly

maitcoyĭtûk kus tâta omu katc am si kuowurs. Huk
envelope kind of white two-feathered arrow lay from firmly hold down. That

ata hukûtc amahava tâtâlĭm utcu. Im hoɻĭnyĭk takiŏ kus tcok
was with it make quiet remain. In sunset direction kind of black

âtcuvĭk. Kontak hap tcoikam mamatcuk ap imûk rsârsoa.
measuring worm. I was that class guessing to my weep.

Kotap' sinyhâĭ-ikuĭ-itam utatk' amtcut ki-ĭkhâ iutcovitkatk' am
Because friendly felt from four times raises up from

rsâ-ârspâl uâ-âminûk am siâm utcutântatk' unatâ. Im ka-atcĭm
short broken from right itself on posts finish. In laying

takĭŏ kus tatk' âtcuvĭk kontak hap tcoĭkam mamûtcĭk ap
direction kind of blue measuring worm I was that class guessing to

imûk rsârsoa.
my weep.

---

[a] Not a magician, "just a wise man."

Then, in the west there was a Black Measuring Worm that was friendly to me and came in answer to my entreaty. He came in four strides and in short broken lengths stood up as crotched posts. In the south there was a Blue Measuring Worm that was friendly to me and came in answer to my entreaty. He came in four strides and in short broken lengths formed the joists to lie upon the posts. In the east there was a White Measuring Worm that was friendly to me and he came in four strides in answer to my entreaty. He in short broken lengths covered the joists with a layer of small poles. In the north there was a Reddish Measuring Worm that was friendly to me and came in four strides in answer to my entreaty. He in short broken lengths covered the other parts in a curved outer layer, thus finishing the framework.

Then, in the west there was a Blue Gopher who came with plenty of brush which he placed layer above layer around the house, covering it as with thin clouds. Around the house were four gopher hills with which he covered it with earth in a thin, even layer, as snow

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Kotap' sĭnyhâĭ-ikuĭ-itam utatûk amtcut ki-ĭkha iutcovitakatûk
Because friendly felt from four times raise up
am rsârspâl uâminûk am siâmp kakai-ĭ uvâopa. Ĭm sialĭk takĭŏ kus
from short broken from right level it laying. In east direction kind of
tântâm âtcuvĭk kontak hap tcoĭkam mamtcĭk ap imûk rsârsoa. Kotap
white measuring worm I was that class guessing to my weep. Because
sĭnyhâĭ-ikuĭ-itam utatuk amtcut ki-ĭkha iutcovitakatuk am rsârspâl
friendly felt from four times he it raise up from short
uaminûk am siâmp rsu-ursurl uvaopa'. Im nanûk' âitû takĭŏ kus
it broken from right straight it laying. In north field direction kind of
wukĭŭm âctuvĭk kŏntak hap tcoĭkam mamtcĭk ap imûk rsârsoa. Kotap
reddish measuring worm I was that class guessing to my weep. Because
sĭnyhâĭ-ikuĭ-itam utatk' amtcut ki-ĭkhâ iutcovitakatûk am rsârspal
friendly he felt from four times he it raised from short
uâminûk am siâmp ukikĭâtatk' unatâ. Ĭm katcĭm takĭŏ kus tatk'
it broken from right curve themselves finish. In laying direction kind of blue
tcufhâ kontak hap tcoĭkam mamtcuk ap imûk rsârsoa. Kotap
gopher I was that class guessing to my weep. Because
sĭnyhâĭ-ikuĭ-itam utatk' ha-akĭa rsaĭ umoa-atak amtcut tcivĭa. Huk
friendly felt many grass killed from came. That
itcuwulĭtk' hukûtc ap isirsa-itcitk' natâ. Kus kuk kâmalt
he raised with that to he thoroughly covered finish. Kind of good thin
tcuwakita ak hap tco. An wukatcĭk tucwu ki-ĭk ap mo-oat.
clouds make and has failed. There behind land four to gopher hills.
Huk ihimĭtcotûk hukutc ap isihiarsk natâ.
That pushed with that to he covered dirt finish.
Kus kuk kufainta ak hap tco. An wukûtcĭk tcuwu itakĭomûk
Kind of good set make and has failed. There around dirt clean
hastcopsp' alĭ muwupâtĭkitûk ĭm kamûk ĭt uta ĭmu tarsowa.
what thing young your likeness in hold this in here place.
Siwât muhutam ko-otck' ipuk ĭmu wutcantcu. Oatcĭk' tân huk
Flame light brand he took here lower place. Cigarette knee that
woĭ am kuĭ. Tak ap ko-orsk vamusk am sialĭk woĭ si-ipueva.
toward from stand. That to stick smoke from east toward puff.
Ta-am kus tâtam utcotcua himûk sialĭk supapûk tcumâ. Kus tâta
Then kind of white stand went east slowly reached. Kind of white

covers the ground. Looking around the earth I selected one to take me up like a little boy and place me in the house. He placed a brand of fire down before me and a cigarette also. Lighting the cigarette he puffed smoke toward the east in a great white arch. The shadow of the arch crept across the earth beneath. A grassy carpet covers the earth. Scattering seed, he caused the corn with the large stalk, large leaf, full tassel, good ears to grow and ripen. Then he took it and stored it away. As the sun's rays extend to the plants, so our thoughts reached out to the time when we would enjoy the life-giving corn. With gladness we cooked and ate the corn and, free from hunger and want, were happy. Your worthy sons and daughters, knowing nothing of the starvation periods, have been happy. The old men and the old women will have their lives prolonged yet day after day by the possession of corn.

People must unite in desiring rain. If it rains their land shall be as a garden, and they will not be as poor as they have been.

---

kikihât uvaopanûk sialĭk sĭpapûk tcumâa. Wutcâ tcuwuɿ
rainbows stretched east slowly reached. Below land

s'ahamasma ukahimûk sialĭk supapûk tcumâa. Wutcâ tcuwuɿ
beautiful shadow goes east slowly reached. Below land

s'ahamasama mamûthât'tk' utcu. Huk tam wors hukunanûkâ
beautiful branched placed. That on grow that different

tcoĭkam mukaiitûta. Kursavatk' vaok tatany hahak skuk motatûk
sort your seeds. Very large stalk wide leaf good tassel

hiâsĭk hikûm pimokam kai-ĭktc' paĭ. Ta-am amutco ta-am siâm
flowers those undying grains ripe. Then was made then good

hasitcok puk kantcu. Kaot taɿs sisĭwutak'tc' huk uta ap kokokuva.
intend take placed. It was sun rays that in to had ended.

Kotak wunatûk am hasĭtcok pa-ak wutcum kupi haskam haĭtco
That was together from intend swallow happy nothing not noticing thing

tatam. Kus kuk mu viapoku-ulĭka, skuk mu tcuhiaka wum
feeling. Kind of good your sons, good your daughters with

kupi haskam haĭtco tatam. Kota humakâ vi-ĭkam kulĭmhâkam
nothing not noticing thing feeling. That one remnant old man

âk' ap tcinyĭvak wutcûm kâ-âk hoɿony uwue nviatc' kamvamp'
old woman to put mouth against inanimate two evenings opposite give sight forward

panymût. Hapûkhums âulĭtk' tatcoak humok âithĭ hap masĭn
crawling. Perhaps will think desire now think deter-mining venture

hukût' tcuwutĭka kotc huk nyuitan natc apahâp, rsâsaĭkam
that land our we that try our right thing discouraged

t'tat'kan.
ourselves feel.

Because I was a boy I did not understand these things. When anyone was preparing food I stood with folded arms. They gave me food so hot that it burned me. I went with a hunting party. They killed a little bird and gave it to me. I thought it was good to eat, so I carried it home to my mother and threw it down before her. When she saw it she turned her back upon it and began to cry. She turned and told me about my father's death. I grieved in my heart and after a time went to consult a man of authority, to whom a boy should not have had the temerity to go. He listened to my story, approved of my plans, and told me to come at a time which he appointed. Then the people would accompany me to the enemy's country that I might see it. When we had gone to an appointed camping place we encamped and I slept well. The next day we continued to the camping place

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Konyŏ vawŏɣaps alĭk'tc' ithap tcoĭkam pimatc. Hastco
Because I was young this kind not know. What thing

hatconyĭ woĭ kukĭtc nyu vâ-âk kâmûtc. Koma hastco stânyĭk
cooked toward standing my stomach hold. You what hot

nyuma konta nyu papaĭtcĭtûk ho. Hastco alâ-âĭtamult ka-atc kont
me give I was me burned eat. What hunting place I

huk âitk' iwors. Komuta hastco kutivĭtc mat moak nyu
that after go. You what kutivitc young kill me

tcultsp. Konyak skuk hastco mokĭk ak'tc' kahap tcŏntcŏk'tc'
carry at hip. I was good what shoot and kill telling from bringing

ipuk an nyu âkĭtak wutcâ iwoa kota-amtcum nyuĭtâk
fetch there me mother under to blame for knocking down then she saw

kamko-okam itanewa' ha-akĭa ukokoi matâ. Kota hupaĭ tcukak
turned back sat many her cry open. That sometime then

am kookĭtûk ipuk in nyu wutcâ iwoa ithap tcoĭkam
there ended fetch in me under to blame for knocking down this kind

haĭtco has utcok'tcĭm. Kota it imho nyu uta kukĭva kontak puk
anything making accident. That this there me in stand I was hold

iwors. Â-âtam hupaĭ ta wotatcum kuhas ulata kont huk pihas
rise. People where sit important kind of regard I that no

ulitak huk woĭ ivapûk'kĭ. Ithap tcoĭkam nyu tatcoĭ ipuk
think that toward pass through. This kind me plans fetch

an wutcâ iwoa. Kotaps nyu hâĭ-kuĭ-itam utatûk an puĭk
there under to blame for knocking down. He was me friendly felt there grasp

haĭtco nyĭu aka. Am tcotcoĭ huk sialĭ kontak am sihasiɣrsolkahĭm
thing me advice. There appoint that mornings I was there clear away with something

kot am himûk am uai kont huk puk iwors. Himuk hupai
that there going there reach I was that grasp rise. Going some

agreed upon and there I slept well. The next day we reached the land of the Apaches, where I was afraid. I kept my body protected with my shield and carried my club in hand. I could not rest for fear. Then I remembered how my mother had told me what my feelings would be in the enemy's country. She told me that the birds would sing differently, all nature would be strange; but she did not tell me all. This is the feeling that one experiences. The next day I reached the Apache mountain, where I felt like a drunken person from fear. I lost faith in my bow. I was frightened at sight of an old reed arrow of the Apaches. Then as I sat below the mountain I swayed from side to side looking for the enemy. Again I remembered what my mother had told me of the perils among the enemy. The next day I arose and went to the springs of the Apaches, where I saw a gourd drinking cup, with which I cleared away the surface of the water and drank. Thinking that perhaps my father had been brought to that place by the Apaches, I was alarmed and feared that I must already be in danger, because I had drunk the water belonging to the enemy. The next day

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tcuwuɿ matcolĭtûk huk tam hoɿĭnyĭk woak s'aptahatam kâĭ. Kota
land appointed that over evening overthrow right feeling sleep. That
massĭ kont worsanyĭk himûk hupaĭ tcuwuɿ matcolĭtûk huk tam
morning I was went going some land appointed that over
hoɿĭnyĭk woak s'aptahatam kâi. Kota masĭ kont worsanyĭk
evening overthrow right feeling sleep. That morning I was went
himûk ap aĭ Â-âp tcuwutaka huk nâtakĭk katc siukafwkatc'
going there reach Apache land that madness lay difficult
ka-atc. Hâkĭ' sikâlk' katc umaĭrstc' katc, os rsâpalk katc
there. Hide round lay covered lay, stick short lay
siumaĭrstc katc. Âva-am a-aĭ nyu iaɿ. Konya hap ĭntatam.
very covered lay. And there sway me rolling. I was with feelings.
Ahu-u, ĭt âks[a] hap a-aktc' hap kaitc' huk nyu âkĭtak panya ĭntatam.
Yes, this is what was meant as said that me mother I was feelings.
Kota masĭ kont himûk ap aĭ Â-âp tŏaka kok huk naʌamûtak
That morning I went there reach Apache mountain it that drunkenness
katc siûkakavitc katc tcotc. Kat molĭnyĭk va-apk' takrsûnyĭk
lay very resembling lay small mountain peaks stand. Bow broken reed strip
katc siutcutânytc tcotc. Kŏt huk wutcâ ap nyu tarsûvak
lay very strengthen standing. It that under there me sat
âʌa-am a-ai nyu iaɿ. Konya hap ĭnta'tam, ahu-u, it âks
and then swaying me rolling. I was with feelings, yes, this is
hap a-aktc' hap kai-ĭtc huk nyu âkĭtûk panyu ĭntatam. Kota masĭ
what was meant as said that me mother I was feelings. That morning
kont worsanyĭk himûk ap aĭ Â-âp rsotakĭ. Âvawoɿ nyu mâ-â
I was rose going there reach Apache water. It was me hair
hĭkĭvanyĭk'tc' hukatc'p' umairstc' katc kus kuk mamathoɿ ʌpâɿak
cut out roughly that with covers lay kind of good water plants like
huk hokit ap katc huk nyu kârsova haĭnyĭk. Kŏnta huk ipûk
that beside to there lay that me skull broken. I was that take
hukûtc kamikufĭtckuʌa am vasipûk ap i. Anya hastco
with it knock down there take there drink. I was something
anhotcum rsapupu. Kota masĭ kont worsanyĭk himûk ap aĭ
trying to grasp. That morning I was rose going there reach

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[a] Ît âks refers to something held in the hand or discovered to be true.

we reached a black water, where I smelled traces of the Apaches, who had washed off their paint in this water. I cried when I thought of the camp fires whose ashes now drifted to and fro on the winds. Around that spot my imagination revolved four times, like the wind twisting around an object. Wandering about I again remembered what my mother tried to tell me. This is what one feels in the land of the Apaches.

My friend Coyote went toward the east to spy upon the enemy. I relied upon him for information and assistance and put away my imaginary fears. He looked carefully about and returned to tell me that he had found the Apache fires. Then our party, with the courage of fierce predatory animals and raptorial birds, ran toward the enemy. Nothing could stop us and we swept them away with scarcely any resistance. We killed all and gathered up their property to return. My trail was down a steep declivity and I reached home, slackening speed only four times during the march.

Â-âp rsotaki. Kawot nyu woĭhĭâ tcokolĭtak'tc' hukatcp umairstc,
Apache water. That was my face black paint at once covered,
wuskâ s'mataĭmakĭ huk hokĭt ap katc huk nyu kârsova haĭnyĭk.
all over ashes resemble that beside to there, lay that me skull broken.
Kus kuk kâʌaʇk hao wupâʇak kont huk am puk hukatckam
Kind of good hollow cup like I was that there take with it
ikufwĭtckuʌa am vasĭpk' ap i. Âva saso-ofw(u). Map ku-uk
it knock there take there drink. And smell. Close to standing
huk hâtaĭ ap wutcâ huk tcuwuʇ sva-avanyĭtc katc. Âvawoʇ nyu
that stone there under that earth wet lay. It was me
â-âktc hap tcoi-ĭk, an ʌukatc huk nyu huwulĭk ki-ĭkhâ siûĭtâp
tears as it is there around that me wind four times twisting
konya huk parsâ aptcĭm nyu hadrsap ka-am a-aĭ himĭn naʇkĭt.
I was that front of there me stick to was swaying going to and fro.
Konya hap intatam; ahu-u, ĭt âks hap ak'tc' hap kaĭtc huk nyu âkĭtak
I was with feelings; yes, this is what was meant as said that me mother
panya ĭntatam. Kaĭm sialĭk takĭŏ kus kâmakĭ't' uwumakalt
I was feelings. Far away east direction kind of gray our friend
kotpk' Â-âp s'kakĭkam kont ap imûk rsârsoa kotap sĭnyhâĭ-ikuĭ-itam
able Apache trailer I was there my cry he was friendly
utatûk ametcût wupûk tcivĭa. Ami utcuwulitk' am tcu Â-âp
felt from first came. There he raised himself there saw Apache
nanta worsanyĭk wukûtc pitcĭmitahimûk tcoĭkam nyunarsûnahimûk
fires rose around around going appearance me look carefully
opam tcivĭak nyu akĭt. Tcuwuʇâ mututam o-ofĭk ta-atam uwupâkĭk
turn around came me tell. Ground on running birds fly it like
huk nyu viapâku-ulakak nyunyĭk tam ap uiava ap piatco
that me sons jump on there alight on there nothing
tatûkitcotûk' ap sûtapam puĭ. Wukutc katcĭm nanûkatcoitcikatc
easily capture there sweep clean catch. Around home occupations
si-ĭnasĭk sûpapakĭ kawolkatk' puk opam ha-ahâk inyûoa. Kotak
all gathered slowly packed grasp turn around me around. With that
nyu vâkĭta skoĭvâtam utcu kont huk âitûk ki-ĭk aprsorsûk
me trail steep false appearance I was that followed four incantations
ap nyu tcuwutĭka tam oapa. Hukûtc am simaĭsk tcu huk
there me country on brought. With it there entirely left that
covered

The news of victory which I brought caused my people to rejoice with singing and dancing. There was a magician's house, enveloped in white winds and white clouds, into which we went to perform our ceremonies. The captives excited the children, who ran about bewildered.

You may think this over, my relatives. The taking of life brings serious thoughts of the waste; the celebration of victory may become unpleasantly riotous.

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nyu tcuwutĭka. Âvawoɩ makai ki, stâta huwulĭkûtc si-ĭpistc
me country. It was that magician house, white wind with entirely around
tâta tcuvak katc si-ĭmaĭtconĭtc ku-uk. Kŏnt huk uta am va-akĭ'
to put clouds lay entirely envelope stand. I was that in there get into
Â-âp alĭ nyu pui, kot huk uta am rsârsoa. Kŏt huk â-âkûtc
Apache young me captive, it that in there cry. It that tears
stcuhutûkĭm sûka-akâl hihimûk sku-uk nyu viapâpu-ulĭka ap kuĭ,
blue curves going good me sons there drop,
sku-uk nyu tcuĭhĭyaka ap kui. S'ha-ap hapûk humrsâ ulĭtk'
good me daughters there drop. That way you you will think
tatcoa, na-ankâ tcoĭkam nyu imiki' kotc humo hap paɩûma tâ-atan
want various things me relatives we now that lazy make
huk pat rsâĭka natc apohâp takaĭhâkim kaĭtc.
that despised slave we right think disturbance said.

WAR CHIEF URGING THE PEOPLE TO GO ON THE WARPATH AGAINST THE APACHES[a]

Yes, my poor brothers-in-law; this land was covered with herbage. The mountains were covered with clouds. The sunlight was not bright and the darkness was not dense. All was rolling before our eyes. It was thought that the time had come for considering these things in council, my brothers. Then wood was gathered and a fire kindled, the flames of which burst forth, reaching to the sky and causing a portion of the earth to fold over, disclosing the under side, where a reddish mountain stood. After these things had happened the enterprise was decided upon.

Then my breast was tightened and my loins girded; my hunger was appeased; sandals with strings were made for my feet; my canteen

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AhU-U, rsâĭk tahatam nyU kikiû. Kâva hUmo ĭt ʌakta katcĭm
Yes, sad feelings me brothers-in-law. It was how this thing spread on the ground to sit upon laying

ha-akĭa a-anûkatc Umaĭrstcaĭp tcom katc. Tam tâta-ak tcotcoatc
many feathers with he covered it lay. On mountain his standing

ha-akia suvikitak tca-ip tcom tcotc. Tam tataf tcom ihivathĭk
many lets down with it stands. On sun it came but

pitânûlĭktc' ihi. Tam tcohokomolĭtatc tcom i-ia vathĭk piUkûtaktc' i-ia.
ray not shone came. On darkness his it came rolling but he no darkness came rolling.

Tâva ĭt hapa utco moĭ manûkâ tcoĭkan nyi-ĭmĭl(ĭ). Âvaoʇ hUtcUl nyâ-â
It was this was happened many different class my relatives. It was alone me

vakomakĭtak kŏnta inasĭk am siâ-âm nai-ĭ. Kota am U-Uʇa sitoahimûk
bones old I was gathered there right kindle fire. It was there within rumbling

am sisiʌâʇ mUk tamatcĭm sUpapak(ĭ) maxanûk skoiʌâʇam i-inairs.[b]
there flames burning sky slowly open hollow fold.

TUwoĭ katcĭm tcUwUʇ maskâ oʃ(t) tUwoĭ tcotcĭm tâta-ak wUpkiomĭtk'
Opposite laying land to cause to bring to view hold opposite standing mountain make red

tcotcoa ĭtak haptcoĭkam tcom nyUĭ. Kotava ĭt hapa Utco moĭ nanûkâ
stands I that class then saw. It was this was happened many kind

tcoĭkam nyimĭk(ĭ). Âvaoʇ hUtcUʃ nyânâ-âm kontak ap isitcUtk ap
sort my relatives. It was alone my ribs I was there very saw there

ipûtat. Âvaoʇ hUtcUʃ nyhihi kŏnta ivanyonûk hUkatc sĭs iâm hoʇa
make heart. It was alone my bowels I was stretch with very proper across

nywo. Kaoʇ hUtcUʃ nyhahap kŏnta hastco skU-Uk hok(ĭ) ak pa-ak
tied. It was alone my intestines I was what good food intend swallowed

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[a] This speech is believed to be based upon an adventure in which a Pima gambled with the Apaches and lost all his property. Overcome by the passion for gambling, he wagered the life of his brother and lost. The striking figures of speech indicate the speaker's greed.

[b] Here *s* = a mere hissing.

was made ready. I went about the country, from mountain to village, beneath the sheds and trees, offering all an opportunity to join me. Returning home I thought I saw my brother when I was in a trance. I tried to grasp him and my arms embraced nothing but myself. I somehow caught in my palm what I thought to be his power; turning this over I found it to be but a creation of my imagination, and again I was disappointed. I was unkempt and rough, and my tears moistened the land.

The plan occurred to me to ask Nasia, the old woman magician, for aid. Thinking that I saw her I ran toward the eastward and finally reached her. I said "Yes, you who make the bow of the Apache like a kiâhâ and crush his arrowheads, you who paint triangles and curves on the kiâhâ bottoms with the arrow foreshafts of the Apache dipped

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ĭp skâvât. Âvaoɬ hʊtcʊ| nymâ-âtkʿ ʊlʊtak kŏntak nymâ-â hopûtak
then full. It was alone my head skin I was my hair loose

ap isĭ kai kia-ataɬk siâm isitcʊka. Âvaoɬ hʊtcʊ| nykârsʊva kŏnt
there very make sandal string right put up. It was alone my skull I was

hʊtcʊ| nyʊ-ût ap vaĭkĭtkʿ i ĭk sʊnavaman nyiâk. Iworsanyĭk
alone me blood there put in drink intoxicated talk. Arose

tcʊtcʊwʊɬ tcotcovĭtkʿ âĭtkʿ ikʊxiamhĭ mamtaip iawĭs kŏntʊk âĭtk
lands hills after slowly go ashes thrown I was after

ikʊxiamhĭ. O-os ʊ-ʊktak ʊta ikʊxiamhĭmûk tcom nyʊ matciamahimûkʿ
slowly go. Trees shadows in slowly go then my considering

pinakâ. Tcʊwʊɬ sʊtapkʿ tam kopa| hʊtcʊ|woa, kota ĭt kʊ himûtam
unsuccessful. Land smooth on face down slide it was this kind of

tʊtamai tcʊkak amtcʊt koewoa ihʊtcʊ|woak nyparsâ kʊ kiowoa.
going our above came there from down slide my breast stand.

Kŏnta an tcom kâmûk antaprs ʊtcʊ| nykâm. Hasĭtcok pʊk nymatkʿ
I was about try embrace I was alone me embrace. Somehow take my palm

ʊta woak a-ai wopak tcom tcʊtcʊkak âva hapta nyʊĭt hâkĭm tcoĭ-ĭk
in throw all throw then examine it was sight of disagreeable sort

kʊs kʊ-ʊkʊny rsâiktak. Woĭhya stcoktak mâ-â sikĭvânyk. Ahʊ-ʊ,
kind of good sorrow. Face dirty head rough. Yes,

kônyûks anytcôm sirsâĭktak taktcĭtkʿ nyʊlĭt. Piam haĭ-ĭtco iâ-âksûn
guess me then much misery embrace thought. But here something

tampʿ ʊolĭntcʿ kʊs kʊ-ʊk rsâiktaktc amtcʊt â-âkatc kokoiʌa sisĭʌaɬ
are on being held kind of good misery from tears down trembled

ihohotktc wʊtcâ tcʊwʊɬ va-akanûk tcʊ. Kâva ĭt hapot tcoĭ-ĭkam
descending under land damp place. It was this thing class

mʊntatcoĭ kônta ipʊx mʊk sisiaatkʿ parsâ woa kʊ Nasia âks makai.
my plan it was took far east front of throw kind of Nasia old woman magician.

Kŏntak hap tcoĭ-ĭkan mamtcʊk hʊk woĭ stcʊkam taĭ-ĭwonyk ap
I was that class guessing that toward dark sat there

sʊpapak(ĭ) tcʊmâ-â. Anya hap kaiitam wʊmatc nyiâk. Ahʊ-ʊ,
slowly covers. I was that loud with talk. Yes,

kopava apĭm olĭntc. Â-âp kat sʿiâm vapûkaɬ wʊpâkĭt. Â-âp
you there hold. Apache bow right reed artificial likeness. Apache

o-o kop kaikʊirsontc sʿiâm isiâmmakĭɬat. Â-âp vât kopʊk. A-âp
arrow you crushed right put back on. Apache his at take. Apache

ʊ-ʊt katc sʿahamasma mo-omovĭtc â-âhântc hʊkatc hʊk ʊkiâhâ
blood with beautiful triangles painting with that his kiâhâ

sĭsʊvinam kʊo(f)ʊrsp. Â-âp ʊ-ʊtkatc sʿahamasma ka-akâ| iâ-âhânû(k)
very hard more weight. Apache blood with well look curved painted

in his blood, you who twist the hair of the Apache and tie your kiâhâ with it." Thus I addressed her and she gave me a bundle of power which I grasped under my arm and ran with it to my home.

I thought of Vikârskam and prayed for his aid. When I finally reached him I said, "Yes, your house is built of Apache bows and bound with their arrows; you use his bowstrings and sinew to tie these withes. You use Apache headdresses and moccasins to cover your house. Within it you have square piles of Apache hair. At the corners of the piles cigarettes give off wreaths of smoke, resembling white, black, glittering, purple and yellow blossoms." Thus I spake and he gave me power which I carried away beneath my arm.

I thought of South Doctor and finally prayed to him. I said to him, "Yes, you who can make the Apache bow as harmless as a rainbow, his arrows like the white tasseled grass, his arrow shafts like soft down,

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ukiâhâ. Â-âp kop kŏp s'âkrsp imulutcotc hukatc sîs iâ-âmp ipuphu.
his kiâhâ. Apache hair you left make run with very right tighten.

S'ha-ap anya ikaĭtam wumatc nyiâk kota hastco sku-ukam ak sĭs
Way I noise with talk it was what good said very

kavitcĭm nyhukrsp(ĭ) ĭtak siskavitcĭm hukrsk am tai-ĭwors. Ap
narrow me hugged I that very narrow hugged there go out running. There

kuĭrsk tcux iahapunytco. Âva ĭt tam kus tcohokom sikâlktc katc.
stepped bound here approach. It was this on kind of darkness round lay.

Âva uta s'iâ-âmp uolĭntc ku vidârskam makai. Kŏntak hap
It was in right being held kind of down nest magician. I was that

tcoĭ-ĭkam supapaki tcumâ-â. Anya hap kai-itam wumatc nyiâk.
class slowly correct. I that loud[a] with talk.

Ahu-u, kopava apĭm olĭntc. Â-âp kat s'iâ-âm sikikiâ. Â-âp o-o katc
Yes, you there hold. Apache bow right bend too much. Apache arrow lay

kaisipirsp. Â-âp kia-aɫak Â-âp tatakatc sîs vinam woɫ. Â-âp
across bind. Apache bowstring Apache sinew his tighten knot. Apache

vanam Â-âp taɫârsakatc simai-ĭtcontc kux. Huk uɫak Â-âp kops
headdress Apache sandals with cover stand. That in Apache hair

tcotcopolĭmp ia-aks. Tcotcopolĭɫ ap tcotc â-âvaptck(ĭ) tatantc hutcuɫ
squarely piles. Made corners there stands cigarettes knees alone

kodrsantc ku nanûkâ masma uhiasĭtahĭm. Stâtam uhiasĭtahĭm
smoking kind of different colors blossoms. White blossoms

stcotckom uhiâsĭtahĭm sunanafkĭm uhiâsĭtahĭm supitumukĭm
black blossoms glittering blossoms dirty

uhiâsĭtahĭm s'oa-ama uhiâsĭtahĭm. S'ha-ap anyaĭ kaiitam wumatc
blossoms yellow blossoms. Way I noise with

nyiâk. Kŏta hastco sku-ukam ak sĭskavĭtcĭm nyhukrsp(ĭ) kŏntûk
talk. It was what good tell very narrow me hugged I was

sĭskavĭtcĭm hukrsk' am tai-ĭwonyûk kaiĭrsp ĭnataki. In ku Vakolo
very narrow hugged there go out running straddle came. In kind of South

Makai kŏntak hap tcoĭ-ĭkam supakak(ĭ) tcumâ-âk anya hap kai-itam
Doctor I was that class slowly covered I that loud

wumatc nyiâk. Ahu-u, kopâʌa apĭm olĭny. Â-âp kat kopa kus
with talk. Yes, you there hold. Apache bow you kind of

ku-uk kiâhâɫ wupâkĭt. Â-âp o-o kopa kus stâta moɫatkam wupâkĭt.
good rainbow liken. Apache arrow you kind of white tassel liken.

Â-âp vât kopa kus ku-uk vik(ĭ) wupâkĭt. Â-âp ors kopaprs pĭt
Apache arrow-shaft you kind of good down liken. Apache arrow-head you make mud

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[a] In this manner or in this wise, what was said or how the voice is modulated.

his arrowheads like thin dry mud, his arrow poison like water fern upon the pools, his hair like rain clouds."

Thus I spake, and he gave me power which I grasped under my arm and journeyed westward with four slackenings of speed. The home magician gave me a seat of honor. The cigarette smoked, and I took it and, drawing in a cloud of smoke, I prayed to Old Woman Magician, saying, "Yes, you make the Apache bow like a game ring; you crush his arrow shafts and make headbands of them; you split his arrow foreshafts, color them with Apache blood and make game sticks of them; his arrowheads you make like pottery paddles; you make a girdle of Apache hair." Thus I spake and he gave me his power, which I caught under my arm and ran home, with four slackenings of speed. The home magician gave me a seat of honor. The cigarette smoked, and I took it and, drawing in a cloud of smoke, breathed it forth in the direction of the enemy. The power grew and shone on

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kâmaɩk wupâkĭt. Â-âp hinatc kopaprs kus ku-uk mamathâɩ wupâkĭt.
thin liken. Apache arrow poison you make kind of good water plant liken.

A-âp kop kopa siâ-âm vi-ĭtcwoɩ wupâkĭt. S'ha-ap anyaĭ kai-itam
Apache hair you right (?) liken. Way I loud

wumatc nyiâk kota hastco sku-ukam ak siskavĭtcĭm nyhukrsp(ĭ)
with talk it was what good told very narrow me hugged

kŏntak sĭskavĭtcĭm hukrsk am taĭwonyûk am hotĭnyĭk woĭ ki-ĭkap
I was narrow hugged there go out running there west toward four

rsârs ku Aks Makai supapak(ĭ) tcumâ-âk anya hap kai-itam wumatc
renewals kind of Old Woman Magician slowly covered I that loud with

nyiâk. Ahu-u, kopova apĭm olĭny. Â-âp kat s'iâ-âm haxoatc s iâ-âm
talk. Yes, you there hold. Apache bow right make a ring right

mulĭtcĭtakŭt' wupâkĭt. Â-âp o-o kop ki-ĭrsonytc ukoawutcâ sikikoat.
runner liken. Apache arrow you crush his forehead below very circle.

Â-âp vât kop taprsatc Â-âp u-utkatc paprsâ iwupukântc s'iâ-âm
Apache arrow foreshaft you split Apache blood with in front of redden right

kâ-âmhairsakot wupâkĭt. Â-âp ors kopa kus ku-uk ha-atakŏt
a game liken. Apache arrow you head kind of good instrument used for pottery paddle

wupâkĭt. Â-âp kop kopa s'iâ-âm isikisa-a. S'ha-ap nyaĭ kai-iam
liken. Apache hair you right bark girdle. Way I loud

wumatc nyiâk. Kaoɩ uwu-uwue kokokam kŏta pinyhoʌĭtct
with talk. It was facing points it was not me prevent

sĭskavĭtcĭm nyhukrsp(ĭ) kŏntak sĭskavĭtcĭm hukrsk am tai-ĭwonyuk
very narrow me hugged I was very narrow hugged there go out running

am wutcom ki-ĭk ap rsârsk makai nata tcumûk hokĭt an takûtâ.
there to four there renewals magician fire covered edges there release.

Smakaitkam â-âtam sivaksitk' tam tarsuwoa. Avaoɩ makai oatck'
Expert Magician people place prepared with something spread to sit on on sitting. It was magician cigarette

tântc hutcuɩ koɩrsanyĭtc kuk. Kŏntak ap sihâʌâk am nyâpûtak
knee alone smoking stand. I was there inhale there my enemy

woĭ siʌostanûk taihiwoa. Kŏta am kus tâtam utcotcoahĭmûk ap
toward puffed sat. It was there kind of white erected there

and on until it slowly disclosed the enemy. The Pima magician desired that the earth move, the trees take on their leaves, the land be softened and improved, that all be straightened and made correct. The place was one where food was increased and they were gathered about it. Their springs were made larger and they were gathered about them. Their game was gathered together. Some of the enemy were in the west and they said, "We know that harm may come to us if we go to that place, but we will not heed our own misgivings." They started on their journey and camped on the way. In the morning they arose and continued, reaching their friends' camp during the day, where they saluted them. In the distant east were other enemies who heard that their friends were gathering. When they heard of it they said, "We know that harm may come of it if we go to that place,

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sʊpapak(ĭ) tcʊmâ-âk nyuâpûta. Tcʊwʊ̨ hokĭt ap sikaı ihi os ap
slowly covered me enemy. Land edge there around came tree there

kʊ-ʊkam shahaktcotk' wʊtcâ tcʊwʊ̨ mâikatk' s'aptahatcotk'
stand select a tree with many leaves under land softened satisfied

rsʊlʊtcotk' woĭtcotk' ivantckʊwoak hʊk tam ap taktâ. Âvak
straight toward jerked that on there release. It was

hastco kai-ikam matcŏm sĭstąanyĭm katc ʊ-ʊlĭt kŏnt hʊk tam ap
what plants with seed considered very wide lay thought I was on there

sihʊmap ioı. Rsârsânûkam rsorsokia tcum sĭstatanyĭm wʊtck' ʊ-ʊlĭt
together hold. Springs waters then very wide lay he thought

kŏnt hʊk tam ap sihʊmap ioı. Hastco âimʊtʊtam matcŏm
I was that on there together hold. What walking considered

sĭstatanyĭm âimʊlĭk ʊ-ʊlit kŏnt hʊk tam ap sihʊmap ioı. Kŏta am
very wide haunts thought I was that on there together hold. It was there

tcŏm ka hotĭnyĭk takĭŏ takam kʊs mas sʊnyâpûta. ∩mokikatc ot
then here west toward sitting kind of kindly appearance me enemy. His dead he

pik ʊ-ʊlĭttamtc am tcŏm kaiâk pi-ĭnakâk worsanyk himûk hʊpai
like he thought there then heard impossible arose go somewhere

tcʊwʊ̨ matcolĭtk' tam kʊrsk kâĭ. Imasĭ kot worsanûĭk himûk tataf
land considered carefully on fall sleep. Next morning he arose go sun

hʊpai tcok tciviak skai-ĭtamp ʊimû. Âva kamʊk sialiĭtk ap uolĭntc
somewhere there arrive very loud (?). It was distant east there being held

kʊs mas sʊnyâpûta. ∩mokikatc ot pik ʊ-ʊlĭttamtc am tcŏm kaiâk
kind of friendly appearance me enemy. His dead he like it he thought there then heard

pi-ĭnakâk worsanyĭk himûk hʊpai tcʊwʊ̨ matcolĭtk' tam kʊrsk kâi.
impossible arose go somewhere land considered carefully on fall sleep.

Imasĭ kŏt worsanyĭk himûk tataf hʊpai tcok tciviak skai-ĭtamp ʊimû.
Next morning he arose went sun somewhere where came very loud (?).

Âvaǫ kʊ tâhâkiho koĭ-ĭrsâm kʊtars sisi(f)takatc no-omovĭtc pʊm
It was kind of cochineal dye kind of sun rays headdress triangles he

â-âĭ kak sivantckʊwomtc hʊkatc sisiâmp ʊtcʊtcʊhitc katc. Kota
figured that jerked with right it covered lay. It was

ʊta hʊx isikuĭrsk kʊxiwoak nyʊ viapa kʊ-ʊlʊka. Tcʊwʊ̨û
in already firmly stepped stand me boy reared. Land

mʊtʊtam, o-ofĭk ta-atam ʊwʊpâkĭtk' nyʊnyĭk tam ap ʊiwoak ap
running birds flying liken fly on there alighted there

but we must go." They started on their journey and camped once before arriving and saluting their friends. They took sun's rays and painted triangles on their blankets.

While this was happening among them my young men were preparing to fight. They rushed upon them like flying birds and swept them from the earth. Starting out upon my trail I reached the first water, whence I sent my swiftest young men to carry the message of victory to the old people at home. Before the Magician's door the earth was swept, and there my young men and women danced with headdresses and flowers on their heads. The wind arose and, cutting off these ornaments, carried them to the sky and hung them there. The rain fell upon the high places, the clouds enveloped the mountains, the torrents descended upon the springs and fell upon the trees.

You may think this over, my relatives. The taking of life brings serious thoughts of the waste; the celebration of victory may become unpleasantly riotous.

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pia-atco tatkitcotk' ap sutapam puĭ. Tait nyu vâkĭta skoeʌą̂am
nothing wrestle there smooth take. That this me trail hollowed
utcu kŏntûk âĭtk' am ki-ĭkap rsârs. Hokĭtkâ rsotakĭ tam si
laid I was after there four renewals. Edge water on very
humapt ol(d). Amtcut mamtcuk am tcotcoaa kus stco-otcoaatcmakam
one make. There from guess there stand kind of swiftest
nyu vipiâpka. Kŏta ki-ĭkap rsârsk mulifkai-ĭ kai-ĭtc kulivi-ĭkam
me boy. It was four times renewals came running notify old man remain
âks vi-ĭkam. Âva am makai kitcĭk amuk tcuwu̧ tcoĭ-ĭstc katc.
old woman remain. It was there magician door there land powdered lay.
Kotak tam mumutak tcitcivi kus ku-uk nyu viapâku-ulka kus
It was on run play kind of good me boy reared kind of
ku-uk nyu tcuhyaka wum mawârsk tam mumutak tcitcivi. Kus
good me daughter with clasping hands on run play. Kind of
ku-uk nyu viapâku-ulka kus ku-uk paihiwoatc si̧tat kus ku-uk
good me boy reared kind of good tail touch kind of good
nyu tcunhyaka kus ku-uk tą̂rsak(ĭ) ukoa wutca kikoatk' wum
me daughter kind of good foam her forehead under crown with
mawarsk tam mumutak tcitcivi. Kŏtak huwu|katc am sivanyukumiak
clasp hands on run play. It was his wind there broken
tamatcĭm parsâ pia-atcokam an haha̧rs. Amtcut ko-okoewa si-ĭsiʌą̂
spy near by nothing there sticks. There from down flames
ihohotk' kuvipkam sisiatcotcokam tcutcuwu̧ tco-otcovĭtk' tam am
descended surviving powerful magicians lands hills on there
kokokoa. Amtcut ko-okoewa si-ĭsĭʌą̂ ihohotk' kuvipkam
touches. There from down flames descended surviving
sisiatcotcokam tâta-ak kokok ap rsarsai-ĭwa. Amtcut ko-okoewa
powerful magicians mountains peaks there hang. There from down
si-ĭsiʌât ihohotk' kuvipkam sisiatcotcokam rsârsânûkam rsorsok(ĭ)
flames descended surviving powerful magicians springs waters
vufutcĭm tam kokokoa. Amtcut ko-okoewa si-ĭsiʌą̂ ihohotk
laying on touched. There from down flames descended
kuvipkam sisiatcotcokam o-os kokok ap rsarsai-ĭwa. S'ha-ap hap
surviving powerful magician trees tops there hang. Way that
humsâ ulĭtk' tatcoa nanûkâ tcoi-ĭkam inyi-ĭmĭk(ĭ) kotc humo hap
you think plan different sorts my relatives we now that
pa̧ma tâta huk pa̧ rsâĭka natc apâhâpta kaihâkĭm kaĭtc.
lazy make that bad slave way right noise said.

We have come thus far, my brothers. We have already laid our plans. With magic power the trail is made easy, bordered with flowers, grass, and trees. The enemy saw the apparent bounty of nature and assembled, laughing, to gather the seeds and plants. It was the power of the distant magician which made the enemy enjoy his fancied prosperity. In the center of our council ground the fire burned and, lighting a cigarette, I puffed smoke toward the east. Slowly a vision arose before me, a white cane before a whitish house. I grasped the cane and thrust it into the corner of the house and there came forth a kind of white water. Afterward there came forth a kind of white dragon flies, which circled about four times before they sank. In the south stood a blue house with a blue cane before it. Thrusting

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Iat täva tcutcka nanûkâ tcoĭ-ĭkam nyi-ĭmik(ĭ). Huk(ĭ) attavaĭ natâk
Here we came various classes my relatives. Already we finished
hai-ĭtcot aka. Huk(ĭ) isĭvakĭtk' tcu. Konta ĭm sia-lĭk takĭŏ kus tâtam
something tell. Already planned trail placed. I was in east direction kind of shining
hiasĭtk' am nyu ʌâkĭta hokĭt am takĭtâ. Kota am nyu ʌâkĭta âĭtk
artificial flower there my trail edge there dropped. I was there my trail after
ku nanûkâ masma uhiasĭtahĭmûk ap katcĭm tcuwuɫu supapaki tcumâ-â.
kind of different appearance like a wave flowers came there laying land slowly cover.
Kot ap katcĭm tcuwuɫu kunanûkâ masma hiâ. Ap kukam os
That there laying land kind of various kinds full-blown flowers. There standing tree
kunanankâ tcoi-ĭkam hiâ. Kota am tcum nyuĭ kuny âpûtak hastco
various classes full-blown flowers. I was there then see my enemy what
sku-ukam u|(d)ĭtk' am uta tcorsal ihuhumihâ.[a] Kaot muk mamakai
good thought there in slowly he laughed. It was far magicians
tadrsa pamûtaktc' s'ha-apai utcoktc'. Âva ĭm tcuwuɫ s'utafĭtcotc'
placed unite correct result. It was in land mark center
kutânɫam hâtai tunata katc. Huk woĭ am kukuk oatck(ĭ) tantc hutcu|
kind of white stone our fire lay. That toward there standing cigarette knee itself
koɫrsantc kuk kontak ap sihâvâk am sia-alĭk woĭ si-ĭphuewoa. Kota
smokes stand I was there inhale there east toward exhale. I was
am kus tâtam utcotcoahĭmûk sialĭk supapak(ĭ) tcumâ-â. Âva apa kuk
there kind of white stand east slowly cover. It was there stand
kutânɫâm va-akĭtcuk parsa ap kux kutânɫam tciâĭkot. Kontak ipûk
whitish house before there stand whitish cane. I was grasp
hukatc ap itcoɫk' ap sitcoa-akat. Kota ap nyuiâpă kus tâta rsotak(ĭ).
with there made corner there stick. I was there came out kind of white water.
Huk âĭtk' ap nyuĭapa kus tâta vaktcutcuɫhâpĭ. Am ki-ĭkhâ si-ĭskat
That after there came out kind of white dragon flies. There four times around
hihimûk am koavĭt tcotcp(ĭ). Ĭm katcĭm takĭŏ kus tatk(ĭ) va-akĭ kux
going there down sink. In laying direction kind of blue house stand

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[a] A "half laugh; more than a smile and less than a hearty laugh."

the cane into a corner there came out a blue water and then blue dragon flies, which flew about four times and then went back. In the west stood a black house with a black cane before it. This I thrust into a corner and there came forth a black water followed by black dragon flies, which flew around four times and then sank down. In the north stood a yellow house with a yellow cane before it, which I took and thrust into the corner. There came forth yellow water followed by yellow dragon flies, which circled about four times and then sank down.

On the mountain tops was a yellow spider magician, upon whom I called for help. He went to the enemy, darkened their hearts, tied their hands and their bows, and made them grow weak as women. Then he pushed us on to destroy the enemy. We rushed upon the

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tcuk parsâ ap kux kus tatk(ĭ) tciâĭkot. Kontak ipuk hukatc ap
in front stand kind of blue cane. I was grasp with there
itcolkʿ ap sitcoa-akat. Kota ap nyuiâpa kus tatk(ĭ) rsotakʿ kuk âĭtkʿ
made there stick. I was there came out kind of blue water that after
corner
ap nyuiâpa kus tatk(ĭ) vaktcutcuhâp(ĭ). Am ki-ĭkhâ si-ĭskâl hihimûk
there came out kind of blue dragon flies. There four times around going
am koavĭt tcotcp(ĭ). Ĭm hoĭnyĭk takĭŏ kus tcok va-akĭ kuk tcuk
there down sink. In sunset direction kind of black house stands in
parsâ-âp kux kus tcok tciâĭkot. Kontak ipuk hukatc ap itcoĭkʿ ap
front of there stands kind of black cane. I was grasp with there made there
corner
sitcoa-akat. Kota ap nyuiâpa kus tcotckʿ rsotakʿ kuk âĭtkʿ ap nyuiâpa
stick. I was there came out kind of black water that after there came out
kus tcotckʿ vaktcutcuhâpĭ. Am ki-ĭkhâ si-ĭskâl hihimûk am koavĭt
kind of black dragon flies. There four times around going there down
tcotcp(ĭ). Ĭm nanûk(ĭ) âĭt takĭŏ kus oam va-akĭ kux tcuk parsâ-âp
sink. In north field direction kind of yellow house stands front
kux kus oam tciâĭkot. Kontak ipuk hukatc ap itcoĭkʿ ap sitcoa-akat.
stands kind of yellow cane. I was grasp with there made there stick.
corner
Kota ap nyuiâpa kus oa-am rsotakʿ kuk âĭtkʿ ap nyuiâpa kus oa-am
I was there came out kind of yellow water that after there came out kind of yellow
vaktcutcuhâp(ĭ). Am ki-ĭkhâ si-ĭskâl hihimûk am koavĭt tcotck(ĭ).
dragon flies. There four times around going there down sink.
Âvak âtûk ap uolĭntcʿ kus oam tâkûtât makai. Kontak hap tcoi-ĭkam
It was near there being held kind of yellow spider magician. I was that class of
mamûtcuk ap imûk rsârsoa tap sĭnyhâĭ-ikuĭ-itam utatkʿ amtcut ki-ĭkhâ
guess there address cry he friendly felt from four times
skawoĭ tahiwoak ap supapak(ĭ) tcuma-a kuny â-âpûta. Hux ipimaskâ
crouch set there slowly cover my enemies. Already not visible
ipûtatc kakhai wopotkʿ nânâvĭtc kakhai wopotkʿ kat kiattatc kakhai
his soul crossed tied his hands crossed tied bow string crossed
wopotkʿ ataprs hastco pat aupâtk ap woa. Huk âĭtkʿ inyoĭhai kont
tied he made what bad like there throw. That after me push I was
huk âĭtkʿ ita-ak ap kursk ap pia-atco tatkitcotkʿ ap sutapam pui.
that after jumped there fall there nothing wrestle there smooth take.
An wukatc katcĭm nanûkâ tcoi-ĭtckatc si-inasĭk supapak kaaoĭkatkʿ
About around laying various belongings gathered slowly grouped

Apaches and killed them without difficulty. With gladness in my heart I gathered the evidences of my victory and turned toward home.

You may think this over, my relatives. The taking of life brings serious thoughts of the waste; the celebration of victory may become unpleasantly riotous.

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pʊk opam ha-ahâkinyûwoak nytcʊwʊɻʊka tam oa-apa. Hʊk hʊkatc
take homeward face turned my land on brought. That with
am simai-ĭrsk tcʊk nytcʊwʊɻʊka. S'ha-ap hap hʊmsâ ʊlĭtk' tatcoa
there covered placed my land. That way that you thought desired
kotc hʊmo hap padma tâtanûk pat rsâika natc apahâpta kai-ihâkĭm
we now that lazy made bad slave way right noise
kai-itc.
said.

We have come thus far, my brothers. I prayed to the Ocean, to the distant Magicians, and to Down Roll[a] to grant me power. Sun extended his power to me as a descending trail along which the various villages gathered with greetings to each other. A gray headdress was placed upon me. A blue haze enveloped and concealed me as in a garment; in this I was borne along.

I called upon Yellow Raven, who came gladly to my aid. Four times he with crackling gashed the land. Drawing blood from the enemy he sprinkled it in drops upon the land.

On the mountain top was Yellow Spider Magician upon whom I

Iat tava tcʊtcka nanûkâ tcoi-ĭkam nyi-imĭk(ĭ). Konya vaprs
Here we came various classes my relatives. I was there
matai-ĭtc ʊta kopaɿ katc mʊk vavanyĭm imĭtc rsoak. Mʊk mamakai
ashes in face down lying lay far extending my cry. Far magicians
tadrsa pamûtak imĭtc rsoak. Vik Iaɿ(d) Makai imĭtc rsoak. Tâva
placed unite my cry. Down Roll Magician my cry. It was
kʊ vi-ĭtckŭt itcʊrsatk' ʊʌâkĭta skoeʌâɿam itcʊ. Kotʊk âĭtk' am
kind of deer ascend his trail down placed. He then after there
ʊiatcʊk tcʊwʊɿâ mʊtʊtamûk skai-itamp ʊim.[b] Paĭtcp' ʊiatcʊk o-ofĭk
grouped land running loud naming. Further grouped birds
ta-atamûk' skai-itamp ʊĭm. Am paĭtcp ʊiatcʊk tcʊwʊɿâ mʊtʊtamûk
flying loud naming. There further grouped land running
skai-itamp ʊim. Paĭtcp' ʊiatcʊk o-ofĭk ta-atamûk' skai-ĭtamp ʊĭm.
loud naming. Further grouped birds flying loud naming.
Vatai-ip ʊptcʊrsatck' kʊs kâmak(ĭ) ʊsiʌʊta ihodonyĭtk hʊkatc
They were rising kind of gray head dress bring down with
sikopaɿ pʊny atc. Vatai-ip ʊptcʊrsatck' kʊs tcʊtak(ĭ) ʊkâmhaiʌakĭta
face down myself put around They were rising kind of blue hazy
throw neck.
ihodonyĭtk ʊta pimaskâ myolĭnûk ĭnyû pʊpʊhĭ. Âva ĭt tam kʊs
bring down in invisible me held me carry. It was this top kind of
oam haʌanta kontak hap tcoĭ-ĭkam mamûtcʊk ap imûk rsârsoa kotap
yellow raven magic I was that sort of guess there naming cry it was
sĭnyhâĭ-ikuĭ-itam ʊtatk' ki-ĭkhâ am ʊta sikâkâfk ihodonykʊk
he me friendly felt four times there in crackling bring down
tcʊwʊɿ an katcĭm kakhai sikʊofdrs. Hʊmatckam ap âĭmʊtʊtam
land about laying crossed gashed. People there moving
hʊk ipimaskâ ʊ-ʊɿ itcʊrsʊtctk' hâhâtai tatʊɿam s'ahamasûma
that invisible blood bring up stones setting fine appearance
isipanymat. Hʊk âtûk' ap ʊolintc kʊs oam tâkûtât makai. Kontak
fall in drops. That side of there he stays kind of Yellow Spider Magician. I was

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[a] Living in the ruin at Tempe.

[b] Imitc, past tense; ʊim, present. Both convey the meaning of addressing by naming speaker's relationship and person addressed.

called for help. He went to the enemy, darkened their hearts, tied their hands and their bows, made them grow weak as women. Then he pushed us on to destroy the enemy. We rushed upon the Apaches and killed them without difficulty. With gladness in my heart I gathered the evidences of my victory and turned toward home. There I left my firebrands, and I left my knife that the enemy should know that destruction was impending. The sharp stone was left there with which to cut his hair. The land thundered, the darkness trembled, the mountain roared, the trees waved; it was difficult for me to remain under such conditions. One of the enemy came running to that place. He slept a part of the night; but at length fled in terror with a light to seek a hiding place in the rocks.

In the evening Blue Bird sang, because he was glad. Shaking his feathers he transformed the land into a habitable world again, as smooth as the moss under the bushes. In the evening Yellow Bird in the gladness of his heart sang, shaking his yellow feathers.[a] Mountain

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hap tcoĭ-ĭkam mamûcuk ap imûk rsârsoa tap sĭnyhâĭ-ikuĭ-itam
that sort of guess there naming cry he me friendly

utatk' amtcut ki-ĭkhâ skaʌo[tahiwoak ap supapak(ĭ) tcumâ-â kuny
felt from four times crouch set there slowly arrive my

â-apûta. Hul ipimaskâ iputatc kakhai wopotk' nânâvĭtc kakhai
enemy. Already invisible soul crossed tied hands his crossed

wopotk kat kiatûtatc kakhai wopotk' ataprs hastco pat ʌupâtk ap
tied bow string crossed tied he made what bad like there

woa. Huk âĭtk' inyoĭhai kont huk âĭtk' ita-ak ap kursk ap
throw. That after me push I was that after fly there fall there

pia-atco tatkitcotk ap sutapam puĭ. An wukatc katcĭm nanûkâ
nothing wrestle there clean catch. About around laying different

tcoi-ĭtckatc si-ĭnasĭk supapak kaʌo[katk' puk opam ha-ahâk ĭnyuwoa.
occupations gathered slowly grouped catch turn face me home.

Huk tam ap takutâx nyu kotck(ĭ) vi-ĭtak, tafkoan smo-okŭk tam
That top there release my brand remaining, flint sharp on

ap takûtâk hukatcûk ukikiat ho[aʌâkihâk ak hap tco. Hukatcûk
there release with abandoned disturb told that made. With

ukop hixiʌânhâk ak hap tcok huk tam ap takûtâ. Kotak hukatcûk
hair cut roughly told that made that on there release. It was with it

tcuwu[am uta sipuputk' utcu. Stcohokmom am uta sikikifk
land there in roar lay. Darkness there in tremble

utcu. Tâta-ak tcotcĭm am uta sirsarsafk utcotcoa o-os tcotcĭm
lay. Mountains stand there in echoed stands trees standing

am uta simokuofk utcotcoa-akuk tam pita hodontam utco. Kota
there in waved somebody placed in a standing position on not camping place make. It was

humakâ vi-ĭkam nyuâpûta hupaitcut mutatc huk tam kursk tcum
one remaining me enemy wherefrom running that on fall then

kârsk hu-us tcohok uta pi-inakak kotk' hastcoi-ĭkam kaʌa[k' ap
sleep night part of night in can not stand fire what sort of hollow there

itcum vakiamhĭ. Kota hodonûk huʌatcot makai s'hux utatk' kox.
he enter. It was evening Blue Bird Magician glad filled sing.

Kus tcuhutak(ĭ) uwâpâ ikik(ĭ). Kotak hukatcûk tcûwu[s'ahamasma
Kind of blue his feathers shake. It was with it land fine appearance

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[a] The yellow flowers that color the mountains.

tucked these feathers under his belt to improve his appearance. In the evening glad Mocking Bird[a] sang and shook his white feathers which made white the earth.[b]

You may think this over, my relatives. The taking of life brings serious thoughts of the waste; the celebration of victory may become unpleasantly riotous.

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mamathâtk' utcu. Kota hodonûk vatcokok makai s'hux utatk' kox
water plants lay. It was evening Yellowish Magician glad felt sing
kus oa-am uwapâ ikikĭ. Kotak huxatcûk tâta-ak tcotcĭm s'ahamasma
kind of yellow his feathers shake. It was with it mountain stand fine appearance
s'oa-am hihifurspatakûtc tcotc. Kota hodonûk rsok makai s'hux
yellow tuck under stand. It was evening Mocking Bird Magician glad
utatk' kox kus tata uwâpâ ikikĭ. Kotak huxatcûk tcuwuɬ wuskâ
felt sing kind of white his feathers shake. It was with it land all over
tânâtk' utcu. S'ha-ap hap humsâ ulĭtk' tatcoa kotc humo hap paɬma
white lay. Way that you thought desire way now that lazy
tâtanûk pat rsâĭka natc apahâpta kaihâkĭm kai-ĭtc.
made bad slave way proper noise set.

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[a] People. [b] With sunshine.

We have come thus far, my brothers. I went from village to village, telling you to be ready. You came to our village and ate our humble fare and drank from our ollas. As the blue shadows of evening began to fall we gathered in a circle and neglected our usual duties. The next day at nightfall we again gathered and repeated the ceremonies of the first evening.

To-night our medicine-man shall render the darkness yellow and gray, so that we may become invisible to our enemies. He examines his equipment, his shield and club, his sandal strings and the netting of his gourd canteen are tightened, his headdress is moistened and shaped, his black paint is renewed that he may be properly painted

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Iat' tava tcutcka nanûkâ tcoĭ-ĭkam nyimĭkĭ. S'ha-ap ant, hums,
Here place we various classes relatives. That I, yes,
itâta, os nyu moluna wusk ap iwoetahĭ ka-am smatc' âit himûk am
do tree me broken all there distribute there know after going there
utcumâ-âk himûk am utcumâ-â. Kota hupaitcut mu ʒutam nyimĭkĭ
arrive going there arrive. It was where from running relatives
atavaĭ tcivĭa. Âvaprskam katc huk hastcony pat hohokĭ katc
had came. He was lay that what my bad food lay
ukukosĭt. Rsotakĭ nyu vasĭpĭtc ĭp uvavĭnyĭt. Kota imasĭ, kota
he eats. Water me take with he quenched. It was morning, it was
itany ipum hutculuwa kus tcutakĭ nyhoʒĭnyĭk kus tcutakĭ nyhakoata
now you slide kind of blue me evening kind of blue me ring
kontak hap tcoĭ-ĭkam takutâk' huk uta am s'iâm vakĭtk' tarsuwa.
with that that sort of release that in there right enter placed.
Kota imasĭ kota itany ipûm hutculuwa kus tcutakĭ nyhoʒĭnyĭk
It was morning it was now you slide kind of blue evening
kus tcutakĭ nyhaxoata kontak hap tcoĭ-ĭkam takutâk' huk uta am
kind of blue me ring with it that sort of release that in there
s'iâm vakĭtk' tarsuwa. Kota-ama pi-ipuk nyunyâ konta iworsanyĭk
right enter placed. It was the in breathless silent I was arose
tcuwuʒ tciakâsĭk sikuĭrsk kukiwa. Kota ama makai tcokakĭ ikuĭ
land rock shelter stepped stood. It was then magician darkness fell
uhokĭt an oama uhokĭt an m'ata[a] tak' si-ivantckuwak' hukatc sĭs
side by side there yellow side by side there ashy that jerk with very
iâ-âmp maĭ-ĭrsk tcu. Anya huk wukatc am taktc' amhunyuwă.
good covered placed. I was that around there sitting preparing.
Nyu kaʌat masĭt ors rsâpatk' nyu wuntahĭm. Nyu kaĭkĭa
Me shield renew stick short me together. Me sandal
sivinukutcot nyu vakâ sisûvinam pihiwûk. Nyu sivuta sihiavtck'
strings tighten me gourd tightening envelope. Me headdress soften
woehyâ nytcokolĭtc ap uta ip sĭntatak, huk wukatc amûtaktc'
face me black paint there in with spread, that around sitting

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[a] A guttural expulsion of breath follows *m'*.

for the last journey if he should take it. He extends his hands toward the four cardinal points that he may foretell the result of the expedition. We went into the enemy's country and our scout saw the animals running, which the Apaches have started, and he trails them until he comes upon the Apaches warming themselves about their fire.

The scout upon the back trail reports no enemy in sight. The scout in the direction of the enemy, the scout at the west, and the scout at the north report and again return to their posts. From the south the animals come and I have wondered what is happening there. All is silent in that quarter; the land, the mountain, the beasts, the trees are quiet.

The scout from the north reports that he has discovered an old man and a young one. The scout said, "I went out and took my stand in an advantageous position where I could see in all directions. From

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haĭtcok malĭk kaihyam. Kota sia-alĭk takĭŏ tcut kursk avaipung
something listen. It was east direction from fall he was
akĭt. Ĭm kursotak(ĭ) worsutak takĭŏ tcut hastco vâpâkam ukâkûta
telling. In much water origin direction from what hairy killing
hĭmûk itcutcĭtk ĭn pum iaaa. Ahu-ukrs, apa katc apâĭtc nyiatc
going ascended here them fell. Yes, there lay after looking
nyui-ĭtanûk ap âithivaĭ umamasĭtam s'ha-apavaĭ utcoktcinûk
saw there after follow appears and disappears, moving rapidly that manner he made
tcoĭ-ĭtckatc p'any avai-ikaĭtc mokiak'tc' kul katc puny hokatcĭt. Ĭm
property I thus tell sitting big lay me warming. In
rsulĭtcotk' ta-ak ĭn kursk âvaĭ-ĭpuny akĭt. Ĭm ku vâk worsûtak
straightened fly in fall he me told. In kind of trail appeared
takĭŏ tcut ta-ak ĭm kursk âvaĭ-ĭpuny akĭt. Ahu-ukrs, apa katc ap
direction from fly in fall he me told. Yes, there lay there
âĭtc nyiatc nyuĭ-ĭtank ap âĭthĭvaĭ umamasitam sha-apâvaĭ utcoktcĭnûk
after looking seeing there after appear that manner he does
tcoĭ-ĭtckatc pany avaĭ-ĭkaitc mokiaktc' kulkatc puny hokatc. Ĭm
property I manner tell sitting big lay me warming. In
hoǫĭnyĭk takĭŏ tcut ta-ak ĭm kursk âvai ipuny akĭt. Ĭm ku Pa-ak
west direction from fly in fall he me told. In kind of Eagle
kârs takĭŏ tcut ta-ak ĭm kursk âvaĭ-ĭpuny akĭt. Ahu-ukrs, apa katc
nest direction from fly in fall he me told. Yes, there lay
ap âitc nyiatc nyuĭ-ĭtank ap âĭthivaĭ umamasĭtam s'haapâvai
there after looking seeing there follow appear and disappear, moving rapidly that way
utcoktcĭnûk tcoĭ-ĭtckatc pa-any avaĭ-ĭkaitc mokĭaktc kulkatc puny
he does property I told sitting big lay me
hokatcĭt. Ĭm ku rsotakĭ worsûtak takĭŏ tcut ta-ak ĭm kursk âvai
warming. In kind of water origin direction from fly in fall he
ĭpuny akĭt, p'any avaĭ-ĭkaĭtc kos has utco. Tcuwuǫ tâtâlĭm katc os
me told, I said how what do. Land stationary lay tree
tâtâlĭm kux tâ-âta-ak tâtâlĭm tcotc hastco vâpâkam tâtâlĭm â-âimulĭk.
stationary, stand mountain stationary stand what with hair stationary undisturbed.
Ahu-ukrs, hap a-atcok'tc' kahĭm hiap kukiwahai s'ha-akok iuwoan
Yes, there stay direction stand turn and look some one
pâvaĭ-ĭ utcoktcĭnk tcoĭ-ĭtckatc p'any avaĭ-ĭkaitc mokĭaktc kulkatc puny
manner he stays belongings lay I said sitting big lay me
hokatcĭt. Ĭm ku Pa-ak kârs takĭŏ tcut ta-ak ĭm kursk avaĭ-ĭpuny
warming. In kind of Eagle nest direction from fly in fall he me

the west something told me that there were an Apache and his nephew there who killed some game and carried it home, to return at once for more." "Yes," I said, "like foolish children, they wish to die with their daughters, sons, and valuable property." From the east a scout came to tell me that in the brulés the tracks of the Apaches show plainly. "Yes, like foolish children, they wish to die with their daughters, sons, and valuable possessions."

Now a man with the strength and agility of the wildcat crept upon them from that side. And one with the sinuous silence of the gray snake glided upon them from the other side. Another crept up behind the shelter of the trees. Render yourselves invisible upon the gray earth! Crawl through the arroyos, advance slowly. I select a patient aide, telling him what he shall do. He called loudly to another

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akĭt. Ahu-ukrs, hapa-atcoktc' kahĭm hiap kukiwahaĭ s'ha-akok iuwoan
told. Yes, there stay direction stand turn and look some one
pâvaĭ utcoktcĭnûk tcoĭ-ĭtckatc pa-any avaĭ-ĭkaĭtc mokĭaktc kulkatc
manner he stays belongings lay I said sitting big lay
puny hokatcĭt. Aik wusk ap kakaitcĭtk' humiap uolunan kony am
me warming. Now all there notify gather crowd I there
iworsunyhi haĭ-ĭtcova am tcotan p'any avaĭ-ĭkaitc mokiaktc kulkatc
arose something understand I manner sitting big lay
puny hokatcĭt. Kotava vâhâ wusk ap kakaĭtc kotavaĭ-ĭ humiap uoɿ.
me warming. It was true all there notify there were gather crowd.
Konta iworsanyĭk tcuwuɿ tciâkâsĭk sikuĭrsk kukiwa. Ĭm hotĭnyĭk woĭ
I was arose land rock shelter stepped stand. In sunset toward
s'hovĭtam mawak sialĭk woĭ s'hovĭtam mawak rsulĭtcotk s'hovĭtam mawa.
selfish reach for east toward selfish reach for straight selfish reach for.
Kota ĭm hoɿĭnyĭk takĭŏ tcut ta-ak ĭm kursk âvaĭ-ĭpuny akĭt. Â-âp huk
It was in sunset direction from fly in fall he me told. Apache that
utcotcoɿ wumuk umoa-a humo ĭm ĭmât kâkhâ ataĭ imât. Ahuhu a-alva
her nephew with game now in carry twice they carry. Yes, children
naɿa uki apst oa-apaĭm uovitak suaumam ualĭtak suaumam sku-uk
crazy his house there fetch daughter coax his son coax good
hastco utcoĭ-ĭtak suaumam. Ĭm sialĭk takĭŏ tcut ta-ak ĭm kursk avaĭ-ĭ
what his things coax. In east direction from fly in fall he
puny akĭt. Ĭn kus vâpâĭk tamûk vâpâk moĭ-ĭpa-atoa hastco
me told. In kind brulé top trails many appeared what
puĭhyamkotatc sautcitckamaĭp umasĭt. Ahuhu, a-alaa nâta uki apst
gathered places fresh appears. Yes, children crazy his house there
oa-apaim uofitak suaumam ualitak suaumam sku-uk hastco utcoĭ-ĭtak
bring his daughter coax his son coax good what things
suaumam. Kota-ama humakâ vi-ikam nyu viapâku-uluka ta-ama
coax. It was then one remainder me son then
kuofhâ stcoviatkam tcok(ût). Humakâ hâtai mâ-âtcotk' kaipanyĭm.
wild cat sly assume flesh. One stone head came crawling.
Ata-ama humakâ vi-ĭkam nyu viapâku-uluka ta-ama shâmakĭ vamat
And then one remainder me son then gray snake assume
tcokût. Humakâ osukatc mâ-âtcotk' kaipanyĭm. Ata-ama humakâ
flesh. One tree his head came crawling. And then one
vi-ĭkam nyu viapâku-uluka ta-ama skâmakĭ tcuwuɿ tcokût. Humakâ
remaining me son and then gray ground assume flesh. One
vi-ĭrsany mâ-âtcotk' kaipanyĭm. Kŏnyak âĭtc ipkukhĭm. Awaoɿ sĭstco
small arroyo head came crawling. I was after advancing slowly. It was very

to accompany him to see what shall happen. He reached a gap in the mountain and peeped through. Calling to his companion he told him to look and see what is before them. There they saw a fire built by a stump and an old Apache cracking bones. A boy was shouting and a girl was laughing. When he heard this he sent his companion to tell us to hide and remain hidden until he gave the call of the road runner. We heard the messenger coming and thought it was the Apaches, so that we caught up our belongings. Our leader said that some of our friends must have shown themselves, which would cause the Apaches to take the alarm and to depart. As we listened the sun went down and the messenger arrived. He told us to hide and our

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papkĭkam nyimikĭ kontak mamUtcUk am kuĭk âʌa UwUmkam akĭt.
patient my relatives I was guessing there appoint and his companion told.
Âĭk rsasĭkotc vâphai hai-ĭtco va-amtctan p'ata kai-ĭtam tcUtcU. Atava
Hurry then we run something understand he loud said. Then
vâhâ vâpk toa-akatc rsa-aɭk' am spa-apak(i) ikoatcĭtk UʌUmkam akĭt.
true run mountain like his gap there slowly peeped his companion told.
Âĭk miak i-iolĭn kony am ĭnytcU ʌUlĭthĭ haitco va-amtctan pata kaitam
Hurry here hold I there raised something understand just as loud
tcUtcU. Tava vâhâ miak i-ĭoɭ(t). Ta-am i-itcUʌUɭitk' tcUm nyUĭ kota
said. That true here hold. And then he raised there saw then
hUmakâ orsân ap atavaĭ ĭnaĭ. HUk UɭAk â-âp kUli s'ap kaitam a-a
one stump there built fire. That in Apache old right sound bones
rsâny skU-Uk viapâĭ s'ap kai-ĭtam rsavaɭ hinUk' skU-Uk tcUhya
pounding good boy right sound adult condition shout good girl
s'ap kai-ĭtam rsavaɭ tcUtcĭak, kotaam tcUm kayâk UʌUmkam akĭt.
right sound adult condition laugh, then there heard his companion told.
Kamai opam kUksĭmhai hUpaĭt imik(i) tcU-Ukhi akitank hUpai
There homeward fall at intervals where relatives found told where
hastcoĭ-ĭkam kâʌâɭk' ap itcom U-Ustân. Kony hapa tcoi-ĭkahĭm
somewhere hollow there try hid. I here was like
hiwUkatc pitcimĭthai tcUwUɭ tcUmihiakhaĭ hU-Us tcohok Uta
around lay going around earth covered little dark in
hastcoĭ-kam kâvâɭĭk ap haprs itcom hUmU kakan. Kotava vâhâ opam
what kind hollow there will you look. He then true homeward
kUksimûk woitcok tcorsaɭ tcovĭnyhĭm. Kota katho nyU wUkatcûk
fall at intervals straight slowly chortling. Then there me behind
hastco pat koa-aki tatUkU varsai tatUkU.
what bad firewood wrestle grass wrestle.

Rsam piatcU-ûk hai-ĭtco kai-iham na-aks hUpaiva UtcUkĭ hUkt
Silent nothing something listen might where showed our
imik(ĭ) tUwoi tcorsal tcovĭnyhĭm p'ata kai-itam tcUtcU. KotaʌA vâhâ
relatives to us slowly chortle not loud kept saying. Then true
rsam piatcU-ûk hai-ĭtco kai-iham kotak tataf vaprs kam tcŏm kUvĭtp
silent nothing something listen that sun westward glance
kotak Uta vai-ĭ tcivĭa. Haspk' Umakĭtan nanûkâ nyimĭk(ĭ) na-anysapa
then in here came. Undecided told various relatives I guess right
tcivĭa. Kotrs hapa tcoi-ĭkaihĭmhai hUpai hastcoi-ĭkam kâvâlĭk ap
came. Perhaps we in same condition where what kind hollow there
itcŏm tU-Ustăn p'ata kai-itam tcUtcU. Kava vâhâ hastcoi-ĭkam
try hide not loud kept saying. It was true what kind
kâvâɭĭk ap isiatUvintc tai-ihĭm. Ka-am hap tcoi-ĭkahimtc' worsanyĭk
hollow there retreat sitting. There there was in that condition arose
wUkatc pitcĭmĭtahĭmûk tcoi-ĭkam nyUnarsûnahimûk hU-Ustcohok Uta
around going around kind examine in the night into

scout would come for us during the night. We went and concealed ourselves in a cave. The scout came for us and we mistook him for the Apaches and wrestled with the grass and stones in our efforts to conceal ourselves. Our leader said we must be quiet and listen, for it was our friend that was coming. He said he came carefully so as not to give the alarm, but that there were no rocks or trees about the camp of the Apache, so the medicine-men must cause darkness with a yellow and gray edge that will render the warriors invisible.

The medicine-man threw his spell upon the enemy and they slept. The Apache dreamed, and when he awakened he thought it was true that his younger brother and his uncles had been killed. Again he dreamed, and when he awakened he thought, "Did I eat food that I never saw? Did I drink water that I never saw? Things that I never saw have I used for clothing?" When he thought of these things he was frightened and tried to hide himself.

I sent the men with shield and club in two parties in the east and west direction to meet at the camp of the Apaches. Some went straight with me. There, gathered about a stump, are the Apaches. When

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tuwoe rsamonyĭm. Kota katho nyu wukatcûk hastco pat koa-ak(ĭ)
us making noise. It was behind me at that place what bad firewood

tatukû varsai tatukû. Rsam piatcu-ûk hai-ĭtco kai-iham na-aks
wrestle grass wrestle. Silent nothing said something listen might

hupaiAa utcukĭ hukt imik(ĭ) tuwoe rsamonyĭm p'ata kai-itam
where showed our relatives us straight making noise not loud

tcutcu. Kotava vâhâ rsam piatcu-ûk hai-ĭtco kai-iham kotak uta
kept saying. It was true silent nothing said something listen that in

vaĭ tcivĭa. Haspk umakĭtan nanûkâ nyimik(ĭ) na-amysapa tcivĭa.
here came. Undecided told various relatives guess right came.

Pia-âva wukatc hâtai ta pia-âva wukatc os ku-uk p'ata kai-itam
Not good around stone sitting not good around tree stand not loud

tcutcu. Kota-ama makai tcokak(ĭ) ikuĭ, uhokĭt an oama uhokĭt
kept saying. And the magician darkness fall, side by side there yellow side by side

an mata. Kotak ivantc(u)kovak hukatc sĭsiâmp maĭrsk tcu. Kotak
there ashy. That jerked with very right covered placed. That

uta am kurs karsk am paʒâtp utcutckihĭm. Hu-us tcohok uta am
in there fall sleep there perhaps bad of himself dreampt. Some night in there

ĭnyiak hap utatam rsat utco tâva hukiaĭ puĭkûn siu-uhûkĭ
waked that felt himself how do it was long ago catch him older brother

nydrsupĭtc hûntata nyhaki vat hĭk tcivĭa. Kupĭny nyuita
younger brother mother's younger brother father's younger brother I guess he came. Nothing seen

humatckam vant hĭk rsakĭt ai-ĭmu. Kupĭny nyuita hastco hohokĭ
people guess got in among going. Nothing seen what food

vant hĭk ho. Kupĭny nyuita rsotak(i) vasip(ĭ) vant hĭk i. Kupĭny
guess ate. Nothing seen water take guess drink. Nothing

nyuita hastco tcoi-ĭtak vant hĭk tcoi-ĭt't'. Hap ata-atatk'
seen what property guess own. That he thought

amahavapk' mok katc. Awaoʒ kaof(w)k takakam kŏnt am uta taf
there then died lay. It was hard rooted I there in split

tapanûk sia-alĭk takĭo pitcimĭtk' hotĭnyĭk takĭŏ pitcimitk' s'iâmp
in half east direction go around sunset direction carry around right

unam. Kontak hastco pat wum rsulitcut ita. Apai-ĭ humakâ
meet. I was what bad with straightened jump. Up there one

our men heard of this from a messenger they sprang upon the enemy. We killed one who slipped upon the grass and fell down hill and another who stumbled upon a branch. We cleaned up everything about the Apache camp. Animals and birds alone remained to prey upon the dead.

I turned back and my trail was downward. I reached home after slackening speed four times. When at the first drinking place I sent four of my sons to give notice of our approach. They told the old men and the old women at the villages and they rose and cleaned their faces and brushed their hair smooth. Then I came bringing the evidences of my victory. My land rejoiced with me and the mountain donned its headdress, the trees took on gladness. We notified our relatives to the east, west, and south, that we might rejoice together.

You may think this over, my relatives. The taking of life brings serious thoughts of the waste; the celebration of victory may become unpleasantly riotous.

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orsân ap p'ata kai-itam tcUtcU. Kontak âĭtk' ita-ak ap kUrsk
stump there not loud kept saying. I was after jumped put against foot

ap pia-atco tatûkĭtcotk' ap sUtapam pUĭ. Kaoɿ UtcĭnykatC stco
there nothing wrestle there smooth catch. It was his mouth with expert

moa-atkamtc' ap ki-ĭrsk ap itcUAaĭm. Kaoɿ UhotckatC stco
killing there bite there drag. It was his nails with expert

moa-atkamtc' ap hokrsk'an itcUAaĭm. An wUkatc katcĭm nanûkâ
killing grasp there drag. There around laying various

tcoi-ĭtc(ĭ) katc sinasĭk sUpapak kaAoɿ(d) katk pUkU opam ha-ahok
powdered ground lay gathered slowly group took homeward face

inyUwa. Kota it nyU wâkĭta skoiwaɿam UtcU. Kontak âĭtk' ap
I. That this me trail steep incline placed. I was after there

ki-ĭkap rsârs. Kaoɿ rsotakiU nyi-ĭkŏttc' kanyarsan pUkUkrsa kont
four renewals. It was water drinking place near by fall I was

hUk Uta am kUrsk am i. Kaoɿ kUs tcootcoa-atcmakam hUnyU
that in there fall there drink. It was kind of swiftest my

vipiâpka kont hamam tcUk am hatcotcoa-a. Kota ki-ĭkap rsarsk
youths I was had found there appointed. That four renewals

mUlifkai ikai-ĭtc kUlĭ vi-ĭkam âks vi-ĭkam. Kota kat si-ĭtatakrsk
center running to old remainder female remainder. That there put hands

ivamĭk UwoĭhIa mawoak kamiUtakoa Uhakvâtûtak Uta mawoak kam
arose his face touch rub off his mistletoe like head in put hand brush

kaniUtap ka. Konyak âĭtck' kUs s'aptahatkam nyU moa-a oa-atc
smooth. I was after kind of good feelings me killing holding

antavai-ĭ oa-apa. HUk hUkatc am simai-ĭrsk tcUk nytcUwUɿûka
then brought. That with there covered placed my land

nytâta-aka isisisAUtatc os nyU kU-Ursa isitaktcotk isikok(ĭ).
my mountain very headdress tree my planted grasp put on top.

Hotĭnyĭk takĭŏ takam tUimĭk(ĭ) kaitanûk sUmatchait imUtan
Sunset direction sitting our relatives notify inform address

katcĭm takĭŏ takam tUimĭk(i) kaitanûk sUmatchait imUtan sia-alĭk
laying direction sitting our relatives notify inform address east

takĭŏ takam tUimĭk(ĭ) kaitanûk sUmatchait imûtan. S'ha-ap
direction sitting our relatives notify inform address. That way

hapûk hUmsâ UlĭtK tatcoa kotc hUmo hap patmatâtan hUk pat
that you think desires for now that lazy make that bad

rsâika natc apahâpta kaihâkĭm kai-ĭtc.
slave guess on which noise said.

We have come thus far, my brothers. The land about us is truly our own. On my way hither I have slackened speed but four times. The trail led to the white reed, with which I made four passes downward, but there were four layers of earth and I could not reach them all. I made four passes upward, but there were four layers of sky and I could not reach them all. I stood in the center of the world and looked about me. To the westward extended the black trail as far as the base of the black reed. I made four passes downward and four passes upward as before. Again I returned and stood in the middle of

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Ia-ataʌa tcu-utcka nanûkâ tcoi-ĭkam nyi-ĭmĭk(ĭ). Kâvaot nyu
We have come various classes relatives. It was me

tcuwutûka kontak kuĭrsk ĭm kukiʌak ĭm aai nyunhâk tcum nyuĭ.
land that stepped on in stood in looking around then saw.

Ĭm sialĭk woi kus toa han(y) tcukrsantalĭk katc kont huk âĭtkʿ
In east toward kind of white my drawn line lay I that after

am ki-ĭk pʿtcukak ap tcu-umâ-âk tcum nyuĭk ap rsânt ap kuk
there four coming there covered then saw there base there stand

kus toaha vapkʿ. Kont ap rsânt ap mawoak ĭm koavĭt itakĭŏ
kind of white reed. I was there base there reach in down strip

kaĭt tcuwu ki-ĭk ap utam katc kak am pia-is kontak am
this land four there on top of another lay this there not rich I was there

pihukaitcotkʿ am tcux itakĭŏ kaĭt tamkatcĭm ki-ĭk ap utam katc
mistaken there bound strip this above laying four there on top of another lay

kak am pia-is kontak am pihukaitcotkʿ am opam hap intcok ĭm
this there not rich I was there mistaken there homeward that went as before in

tcuwu sʿutaf kukiwoa. Am a-ai nyunhâk tcum nyuĭk ĭm hoinyĭk
land center stand. There look in various directions then saw in west

woi kus tcok nyu tcokrsantalĭk katc. Kont huk âĭtk am
toward kind of black my drawn line lay. I was that after there

ki-ĭk pʿtcukak ap tcu-umâ-âk tcum nyuĭk ap rsânt ap kuk
four going there there covered then saw there base there stand

kus tcok vapkʿ. Kont ap rsânt ap mawoak ĭm koavĭt itakĭŏ
kind of black reed. I was there base there reach in down strip

kaĭt tcuwu ki-ĭk ap utam katc kak am pia-is kontak am
this land four there on top of another lay this there not rich I was there

pihukaitcotkʿ am tcuxitakĭo kait tamkatcĭm ki-ĭk ap utam katc
mistaken there bound strip this above laying four there on top of another lay

kak am pia-is kontak am pihukaitcotkʿ am opam hap intcok
this there not rich I was there mistaken there homeward that went as before

ĭm tcuwu sʿutaf kukiwoa. Am a-ai nyunhâk tcum nyuĭk
in land center stand. There in various directions looking then saw

the earth. Looking about me I saw in the south[a] the Sea god, to whom I loudly cried for swiftness, dreams, visions, magic bow and arrows, immunity from cold, thirst, and hunger, and accuracy of aim. These favors he gave me tied in a bundle and I bore them away to my home. In the north were the four living streams[b] stretching in a line, behind which sat the Apache magician. His camp fire shone out upon a reddish reed, which I went and easily pulled out, though I thought I could not. With this reed I scattered the fire, destroyed his food and water. I did this because I feared him, yet when I had finished I was not satisfied. I returned to my home and stood in the center of the land. Again I looked around me and saw in the heavens Talking Tree.

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avarsan hut vâta katc kont huk woĭ iahap nyu tcotcohimûk
there then that laid lay I was that toward here me coming

ap supapak(ĭ) tcuumâ-â. Anya-am sĭsk ai-itam imutc rsoak. Kota
there slowly covered. I was very loud address cry. This

pĭnyu hovĭtc ku nanûkâ tcoi-ĭkam ukuofkutalĭk sku-uk tcu-utcĭk(ĭ)
not me unselfish kind of various things his strength good dreams

tânalĭm haĭtco nyuita. S'apûkam kat kia-atkam sulu ta-atam vapk
visible something saw. Good bow string straight fly reed

tcoi-ĭta. Huoastalĭk kostalĭk piohokĭstalĭk tcoatcmatalĭk sulĭwĭ
smooth. Inured to cold Inured to thirst Inured to hunger swift accurate of aim

talĭk. Hakĭa katcĭm nankoaa tcoi-ĭtcĭk pĭnyuhovitcĭtk' sĭskavĭtcĭm
Many laying various occupations unselfish very narrow

huntak(ĭ). Kontak sĭskavĭtcĭm tak opam ha-ahâk ĭnyu woa. Kaĭm
held. I was very narrow hold homeward face me toward. In this direction

nanûk(ĭ) âĭt woĭ ku vipukam rsorsok(ĭ) ki-ĭk apmâĭtam wuaufte
north field toward kind of remainders waters four successive stay

konyak kakhai am sikukshĭm. Kainot wukatc katcĭmtc huk
I was across there falling. In this around lay stay that

wukatcûk makai am ta. Ha-as siaăt muhutam nata. An wukatcĭk
around about magician there sitting. Large flames light fire. About around

stcohokmom sitânâttc' katc, huk hokĭt am am katcĭk' s'wukiom
darkness shone lay that edge there there staid reddish

rsotakitc' huk utca am ku-uk huk kus swukiom vapk. Am
water that in there stand that kind of reddish reed. There

pihupai miacut hastcokatc tatcoi-ĭtcĭm tcoĭ-ĭk. Kontak huk(ĭ)
nowhere near something powerless condition. I was that

sĭspathâk ulĭtk huk imulivitahĭmk antaprssuputam antcum
very determined thought that dodging toward I feared there I

puk antaprskam hop(û). Antak hukatc huk makai nata am a-ai
grasp I did pulled out. Then with that magician fire there both

sikantat. Skâaâkam hastco hohokĭtc ap iawoĭtc. Kus vavĭnyĭkam
directions scattered. Cloying what plenty of food there thrown away. Kind of quenching

rsotakĭ vasĭpĭtc ap sivasĭpowĭtc. Antak am (p)rstcum hukaiitcotk
water take a drink in a cup for some one who is absent there empty. Then there make that resemble

tatcoa, kaowoq pihukai-ĭ. Kont opam hapĭntcok ĭm tcuwuq
plan, it was not that. I was homeward just as before in land

s'utaf kukivoak am a-ai nyunhâk tcum nyuĭ. Ava ittamatcĭm
center stand there both directions looking then saw. It was this above

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[a] Vata Katc. [b] Vipûkam.

Branches extended in the four directions; that toward the west held the black wind, which came down upon me and, taking me by the hair in his grasp, carried me to the margin of the earth where he left me. This he did to render me hardy and brave. The branch toward the south bore the hurricane, which grasped and bore me to the edge of the world. He did this that I might become brave. The east branch bore the white wind, which came slowly down and grasped my head and swung me to the margin of the earth. He did this that I might become brave. The straight branch bore the licking wind, which grasped, swung, and slowly carried me to the edge of the earth. This he did to inure me to hardship. Now I thought that all was done, but it was not.

I returned to my home and stood in the middle of the land. Looking about I again saw above me Talking Tree, bearing on its western

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parsâ kuk hunyiâktam os. Am a-ai s'nânâlĭtc kuk. Ĭm hotĭnyĭk
near tnat under kind talking tree. There both directions branches stand. In sunset

woĭ ĭmamahaktc huk tam am kuk kus tcok huoʌuɿ(d). Amtcut
toward branch that on there stand kind of black wind. There from

a-akrsp ihodonyĭk iany mâ-âtam nyu rsak tamatcĭm parsâ ki-ĭk ap
down went down here overhead me grasp above near below four there

sinyuvitotk' amtcut supapak(ĭ) ĭnyu hodontahĭmûk tcuwuɿ hohokĭt ap
me swing therefrom slowly me down land edges there

a-ai sĭnyu kukiolĭktc. Âvapihaskam haitco tathâk nyuaktc ap nyu tco.
both directions me fix at edges. It was nothing what feel me told there me do.

Âva ĭm katck'woĭ ĭmamahaktc' huk tam am kuk huk kusiofhuwuɿ(d).
It was in ocean toward branch that top there stand that kind of bitter wind.

Amtcut a-akrsp ihodonyĭk iany mâ-âtam nyu rsak tamatcĭm parsâ
Therefrom down went down here head top me grasp sky near

ki-ĭkap sĭnyu vitotk' am tcut supapak(ĭ) imyu hodontahĭmûk tcuwuɿ
four times me swing there from slowly me lowered land

hohokĭt ap a-ai sĭnyu kukiolĭktc. Âva pihaskam haitco tathâk nyu
edges there both directions me standing. It was nothing thing feel me

aktc' ap.nyu tco. Ĭm sialĭk woĭ ĭmamahaktc' huk tam am kuk huk
told there me do. In east toward branch that on there stand that

kus toahuwuld. Amtcut a-akrsp ihodonyĭk iany mâ-âtam nyu rsak
kind of white wind. Therefrom down went down here head top me grasp

tamatcĭm parsâ ki-ĭkap sĭnyu vitotk' amtcut supapaki inyu
sky near four times me swing from slowly me

hodontahimûk tcuwuɿ hohokit ap a-ai sĭnyu kukiolĭktc'. Âva pihaskam
lowered land edges there both directions me stand. It was nothing

haitco tathâk nyu aktc' ap nyutco. Suld kukam tam am kuk ku
thing feel me told there me do. Straight standing on there stand kind of

vinyom huwuld. Amtcut a-akrsp ihodonyĭk iany mâ-âtam nyu rsak
licking wind. Therefrom down lowered here head top me grasp

tamatcĭm parsâ ki-ĭkap sĭnyu vitotk' amtcut supapak(ĭ) ĭnyu
sky near four times me swing from slowly me

hodontahĭmûk tcuwuɿ hohokĭt ap a-ai sinyu kukiolĭktc'. Âva
lowered land edges there both directions me stand. It was

pihaskam haitco tathâk nyu aktc' ap nyu tco. Hap atavaĭnytco.
nothing thing feel me told there me do. There finished tests.

branch the black lightning. This came in a thunderbolt, which split the earth and made a furrow toward the north as far as the Apaches. This caused the spirit of our youth to be strengthened. In a vision the location of the enemy was disclosed. The south branch bore the blue lightning, which descended to split the trees in all directions, rendering visible our enemies. In the east the white lightning descended to split and scatter the mountain in all directions, rendering visible the enemy. The straight stem bore the blue lightning, which descended in a bolt, splitting the sky in two parts and disclosing the plan of the Apaches. After receiving these powers I was pushed toward the enemy. I rushed upon the Apaches and killed them without difficulty. With

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Kontak amursptcum hukai-ĭtcotk' t'tcoa kaoɻ pihukaĭ-ĭ. Kont opam
I was there then that thing (or that) desires it was not that. I was homeward

hapĭnytco. Ĭm tcuwuɻ s'utaf kukĭwoak am a-ai nyunhâk tcum nyuĭ.
just as before. In land center stand there both directions looking then saw.

Konta tamatcĭm woĭ inyiak tcum myuĭ. Âva ĭt tamatcĭm parsâ kuk
I was sky toward look then saw. It was this sky near stand

huk ku myiâktam ostc am a-ai sunânâldtc' kuk. Ĭm hoɻĭnyĭk woĭ
that kind of talking tree there both directions branches stand. In sunset toward

ĭnaldk' apta kus tcok woehâm. Am uɻa sikâponyĭk ihodonyk amt
branch there sitting kind of black lightning. There in explosion descended there

uɻa sikukioʍoak huk tcuwuɻ am kavĭtc sihioftanûk tuwoe katcĭm
in stand firm that land there narrow furrowed us opposite laying

tcuwuɻ tam am kokowoĭtc. Huk âĭtk' huk viapâĭ ipûtak am
land on there points reach. That after that youth soul there

sitânâlĭtk' aptco. Aptarsâ prsoɻ(d) huk nyu âpûtak huki atava nyu
visible that do. Disclose throw that my enemy that me

woitatk' haptco. Ĭm katck' woĭ ĭnaldk' apta kus tatk(ĭ) woehâm. Am
for me made. In ocean toward branch there sitting kind of blue lightning. There

uta sikâpânyk ihodonyĭk o-os aptcotcĭm am uta sitafutrsk am a-ai
in explosion descended trees standing there in split there both

sĭnyuntc. Aptarsâ prsoɻ(d) huk nyu âpûtak huk(ĭ) atava nyu woetatk'
directions throw. Disclosed through that my enemy that me for me

haptco. Ĭm sialĭk woi ĭnaldk' apta kus toaha woehâm. Am uta
made. In east toward branch there sitting kind of white lightning. There in

sikâpânyk ihodonyĭk tâ-âta-ak tcotcĭm am uta sikamtrsk am a-ai
explosion descended mountain standing there in split there both directions

sinyuntc. Aptarsâ prsoɻ(d) huk nyu âpûtak huk(ĭ) atava nyu
thrown. Disclosed through that my enemy that me

woetatk' haptco. Suɻ(d) kukamt apta kus stcutak(ĭ) woehâm. Am
for me made. Straight standing sitting there kind of blue lightning. There

uta sikapanyĭk ihodonyĭk huk tutamatcĭm am uta sikâmûtanûk ap a-ai
in explosion descended that our sky there in split there both directions

sitarswoa. Aptarsâ prsoɻ(d) huk nyu âpûtak huk(ĭ) atava nyu
fly apart. Disclosed through that my enemy that me

woetatk' haptco. Huk âĭtk' inyoĭ-ĭhai. Kont huk âĭtk' ita-ak ap
for me made. That after me pushed. I was that after jumped there

gladness in my heart I gathered the evidences of my victory and turned toward home.

You may think this over, my relatives. The taking of life brings serious thoughts of the waste; the celebration of victory may become unpleasantly riotous.

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kursk ap pia-atco tatkĭtcotk ap sutapam puĭ. An wukatc katcĭm
fell there nothing wrestle there smooth take. About around laying
nankâtcoĭ-ĭ tcikatc simasĭk supapak(ĭ) kawo[katk puk opam ha-ahâk
various belongings lay gathered slowly grouped grasp home-ward around
ĭmyu woa. Hapûk humsâ ulĭtk tatcoa nankâ tcoĭ-ĭkam nyu imĭk(ĭ)
me toward. You now thought desire various sorts me relatives
kotc humo hap patmatâtan huk pat rsâĭka natc apâ-âpta kaihakĭm
we now that lazy make that bad slave us right discord
kai-itcĭtan.
said.

We have come thus far, my brothers. The evening has come when I complete my preparations for attacking the enemy. I have made them dislike their bows and arrows and made their magicians drowsy. Their wives and children are reproved and rejected. May they fall out among themselves. May they be unable to eat or drink. The time approaches when they shall die.

After the sun arose we left camp and went to the Sand Hills,[a] where we halted and held a council of war. Morning came quickly and again we went on. I brought my young men together to kill rabbits, rats,

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Iat tava tcuteka nanûkâ tcoi-ĭkam nyi-ĭmĭk(i). Tâva hoɿĭnyĭk ikuĭ
Here we came various classes my relatives. It was evening fall
kuny huk uta moĭ-ĭ nanûkâ tcoi-ĭtcĭk tam maĭ-ĭ tcuxitahĭm kuny
I that in many different sorts on there placed for I
â-âpûta. Katatc s'âhatatctahĭm vapatckatc s'âhâtatctahĭm kâkâĭɿû-
enemy. Bow his cause to dislike reed his cause to dislike be-
tahĭmûk kâsĭtahĭmûk s'ha-ap itâta. Kota hoɿĭnyĭk ikuĭ kuny huk uta
witch make sleepy proper make. It was evening fall I that in
moĭ-ĭ nanûkâ tcoĭ-ĭtcĭk tam maĭ-ĭ tcuxitahĭm kuny â-âputa. Oûtatc
many different sorts on there placed for I enemy. Woman desire for
wumatc vâĭmûtatc s âhâtatctahĭmûk alitatc kamkĭmtatc s'âhâtatctahĭm
gather to lay with desire make dislike child his desire to embrace causes to dislike
kâkâĭɿûtahĭmûk kâsĭtahimûk s'ha-ap itâta. Kota hoɿĭnyĭk ikuĭ kuny
bewitch make sleepy proper make. It was evening fall I
huk uta moĭ-ĭ nanûkâ tcoi-ĭtcĭk tam maĭ-ĭ tcuxitahĭm kuny â-âputa.
that in many different sorts on there placed for my enemy.
Wupa tcoi-ĭkam wumatc âĭmulukatc wumatc nyiakĭmtatc s'âhâta-
Fellow-man sort of with accompany with address make
tctahĭm kâkâĭtutahĭmûk kâsĭtahĭmûk s'ha-ap itâta. Kota hotĭnyĭk
dislike bewitch make sleepy proper make. It was evening
ikuĭ kuny huk uta moĭ-ĭ nanûkâ tcoi-ĭtcĭk tam maĭ-ĭ tcuxitahĭm kuny
fall I that in many different sorts on there placed for my
â-âputa. Hastco hohokĭmtatc rsotak(ĭ) vasĭpĭtc i-imtatc s'âhâtatctahĭm
enemy. What eating desire for water drink drinking desire for make dislike
kâkâĭtutahĭmûk kâsĭtahimûk s'ha-ap itâta. Ava ĭt kuhimûtam s'hâtû-
bewitch make sleepy proper make. It was this kind of going
kaĭ-ĭp unâɿahitcai-ĭp kamo-o. Kontavai-ĭ ipuĭ siʌâɿ muhutam nyu
hurry bend afternoon. I was catch flames burning my
kotak rsotakĭ nyu vasip(ĭ). Varsun alhia tam atava utcu siatcokam
stick water me drink. Yonder small sea sand on they lay magical
nyu tcokakita kontûk tairsk tahiwoa. Am wutcom tatcoĭp sutatkĭm
my darkness I was press sitting. There before me thinking adjusting

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[a] Sand Hills in the Reservoir, a Hohokam reservoir a few miles north of the Double buttes.

and quails. About noon we moved on to Salt river and camped again in the evening. We had too much food and ate it half cooked. Next morning we journeyed on. I went swiftly along the dry water courses, where stands the cat's claw. I went past the rocks to camp at the ironwood trees in the evening and ate the left-over food half raw again. Continuing, I appointed a place of meeting and the day passed. Gathering my young men I told them to grasp their weapons and run forward. Crossing a small canyon they proceeded, killing deer and antelope, beyond the red hill. Knowing the location of the small springs, they went to the low mountain. Others I told to grasp their weapons and run in a westerly direction. They ran through bushes and met those who ran in a line along the dry water courses until they

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kusĭm. Kota s'hâtkai nyu masĭtatc kontavaĭ ipuĭ siʌą̂ muhutam nyu
difficulties. It was hurry me early morning I was take flames burning me
kotak. Kamaintalâ ipupuhimûk varsun tcutckikŭt am antaʌa tcu.
brand. Before me soon carried yonder replace there I was placed
Kota prstcum sikâl muk tataf kotavai humap io|t kuny vipiâpka
It was then round running sun I was come together I youths
kunya am ha-akĭt. Kota ap ikukukuk alnaktc' âĭmututam alkik'tc'
I was there told. It was there striking little ear moving little house
takam ala-antcta-atam tarspi ha-apam tâta. Varsan ku mutatam tam
sitting small feathers way perform. Yonder kind of running top
ataʌa utcu siatcokam ntata|ka kontûk taĭrsk taihiwoa. Ha-akĭa nyu-
they place magician my sun I was press sitting. Many my
moaa tâyak pa wutcom itatcoĭp sutatkĭm kusĭm. Âva ĭt kuhimutam
killing raw before swallow thinking adjusting difficult. It was this kind of going
s'hâtkai-ĭp unâdahĭtciap kamo-o. Kontavaĭ ipuĭ siʌą̂ muhutam nyu
quickly curved afternoon. I was grasp flames burning my
kotak rsotakĭ nyu vasip(ĭ). Vâ-ârsany mulĭnûk hohokĭt an alsopatkam
brand water me drink. Dry washes junction edges about cat's claw
vâ-âtkak konyuk âĭtc' pinatâĭ hap tcoĭ-ĭtcĭk. Alhâtai kux piak
dry wash I was after unfinished there condition at the time of going. Small stone standing go around
antaʌa pĭtc. Alhâĭtkam tcotck' ap atava utcu siatcokam ntcokakita
I was go around. Small iron tree standing there they placed magician my darkness
kontûk tairsk tahiwoa. Ha-akĭa nyu moa-a tâyak pa wutcom tatcoip
I was press sitting. Many me killing raw swallow before thinking
sutatkĭm kusĭm. Kota s'hâtkai nyu masĭtatc kontavai ipuĭ siʌât
adjusting difficult. It was quickly me early morning I was grasp flame
muhutam nyu kotak(ĭ). Kamaint ala ipupuhĭmûk varsuny tcutckikŭt
burning my brand. Before I soon carry yonder ceremonial ground
am antava tcu. Kota prstcom sikâl muk tataf kotavai-ĭ humap iold
there I was placed. It was make round run sun it was unite
kuny vipiapka konya am ha-akĭt. Kota am rsarsk taitcĭtk' ipûm
my youths I was there told. It was there grasp ran up you
athai. A|(d) rsarsûkĭk kakhaip ukâkûtahimûk al ʌuk Kama|k
run after. Small canyons crossed they killing small red thin
Taxtcoi[a] ĭm iava. Ald rsotak(ĭ) worsutak amtcut takitâk takĭtâk a|(d)
end of in fall. Small water came therefrom release release small
hâtai kux ap haahok i-iwoa huk wupukatc. Konyak vi-ĭkam akĭtûk
stone standing there face home that first. I was remainder told
kuny vipiâpka kota am rsarsk hodon takĭŏ ipûm athai. A|(d)
my youths it was there grasp sunset direction you run after. Small

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[a] Camel Back mountain, near Scottsdale.

reached the place where many yuccas stood. They proceeded in two lines, with a narrow interval between them. Unacquainted with the country they went forward, finding deer and antelope, which they killed. Camping on the summit of the small mountain they ate their venison half raw. There they made preparations for continuing, as the time fled swiftly on. Taking up my possessions and a supply of venison for the next day I went forward to camp at the small Gravelly Water. I renewed preparations when I halted at nightfall. Morning came quickly and I went on. During the next day I addressed my young men, telling them to go and kill mountain sheep. They went on to the spring under the kâm tree, where they camped and continued their preparations for war. Morning came quickly and I conjured the

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rsarsai-ĭkam âĭtk' ʊrsarsaittahimûk aɹ(d) vaptâpat kitcĭk an ĭm ĭaʌa.
grassy after penetrate small shade abandoned door about in fall.

Aɹ(d) vâ-ârsany mʊlinûk amtcʊt takĭtâk takĭtâk aɹ(d) otûkoa taɹhak
Small dry washes junction therefrom release release small yucca setting

ap hahok i-iwoa hʊk wʊpʊkatc. Ata ha-asp rsapalt nyʊ vi-ĭ konta
there face home that first. It was small narrow me remain- I was
der

iwors hastco pat wʊm. Hap horsp al(d) tcotcoi-ĭkam sitatakhĭm
arose what bad with. That way small appearance handle

ʊtarspi matck' tatkû tcotck paphaikam nyʊ viptckot tâta vâpkam nyʊ
I not know wrestle black talls me deer white bellies me

viptckot ntarspĭ ha-apam tâta. Varsatc al(d) vapûk tam ataʌa ʊtcʊ
deer I not way make. Up there small reed top they stay

siatcokam ʊtataɹka ĭtʊk tairsk tahiwoa. Ha-akĭa nyʊ moa-a tâyak pa
magician my sun I press sitting. Many my killing raw

wʊtcom tatcoĭp sʊtatkĭm kʊsĭm. Âva ĭt kʊhimûtam s'hâtkaĭ-ĭp
swallow thinking adjusting difficulties. It was this kind going hurry
before

ʊnâdahitcaiĭp kamo-o. Kontavai ipʊĭ siʌâɹ mʊhʊtam nyʊ kotak
bend afternoon. I was grasp flame burning my brand

rsotak(ĭ) nyʊ vasĭp(ĭ). Konyarsp koewoa sihʊtcʊɹwoehĭm. Aɹ(d)
water my drink. I was step down slide. Small

â-âtûkam rsotakĭ tam atava ʊtcʊ siatcokam ĭtcokakĭta ĭtʊk tairsk
gravelly water top they placed magician my darkness I press

tahiwoa. Am wʊtcom tatcoĭp sʊtatkĭm kʊsĭm. Kota s'hâtkai-ĭ
sitting. There before thinking fixing difficulties. It was quickly

nymasĭtatc kontavaiĭ ipʊĭ siʌâɹ mʊhʊtam nyʊ kotak(ĭ). Kamaint ala
me early morn- I was grasp flame burning my brand. Before I soon
ing

ipʊpʊhimûk varsʊny tcʊtckikŭt am antava tcʊ. Kota prstcom sikâɹ
carry yonder ceremonial place there I was placed. It was made round

mûk tataf kotavaiĭ hʊmap ioɹ kʊny vipiâpka kʊnya am ha-akĭt.
run sun it was come together I youths I was there told.

Kotaprs am skavitcĭm nyʊ pia-aɹ ĭtarspi matck' tatk' rsʊm mâmam
It was there narrow me surround I not know wrestle kind heads

tʊhʊhʊmakăt. Varsatc aɹ(d) kâm wʊtcă rsânak ap atava ʊtcʊ
our ones. Up there small kâm (tree) under spring there they placed

siatcokam ĭtcokakĭta kontûk tairsk tahiwoa. Wʊtcom tatcoĭp
magician my darkness I was press sitting. Before thinking

sʊtatkĭm kʊsĭm kota s'hâtkai-ĭ nymasĭtatc kontak âĭmʊlʊkatc s'âhâta-
adjusting difficulties I was quickly me early morning I was haunts his cause

tctahĭmûk katatc s'âhâtatctahĭmûk vapatckatc s'âhâtatctahĭmûk rsotakĭ
to dislike bow his cause to dislike reed his cause to dislike water

enemy's magician. May he not like his bow and arrows. In drinking, may he swallow but his image reflected in the water. May he grasp the branches of trees and fall under them exhausted. I sent my young men east, west, and toward the center. The scout to the east saw the freshly broken grass trodden by the enemy. He sent a messenger to inform us of his discovery and to state that he would report as soon as darkness fell. Hastening to make ready, those in the lead rushed forward. The scout to the west ran in, telling of the discovery of signs in a canyon in that direction. I sent two experienced men to investigate; they moved carefully forward and discovered a camp of Apaches. Like birds my young men swept down upon and surrounded the enemy. I sent my white power and my blue to aid them. After

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vasĭpĭtc siwʊtcă olĭnûk tcʊ. Kota ita-ak ʊta am vataprs ʊ-ʊkʊtak pa.
drink very under hold put. It was jumped in there fall his shadow swallow.
Avaot osʊkatc mamhaktc' hʊk isipʊĭ kotak wʊtcâ am kʊrskai-ĭpop
It was tree his branch that grasp it was under there fall exhausted
kontak hap tcoi-ĭkam tcʊm nyʊi-ĭtâk ĭm sia-al woĭ wâpâĭ-ĭtcotk' hoɟĭ-
I was that sort then saw in east toward sent running sun-
nyĭk woĭ wâpâĭ-ĭtcotk' ʊta wâpâĭ-ĭtc. Hʊk âĭtk' kâĭ hʊ-ʊkĭa rsârs kota
set toward sent running in race. That after not yet any moves it was
sia-al takĭŏ tcʊt ta-ak iakʊrsk hastco wâpâkam kʊĭkmiakatc o-ok ĭn
east direction from flew here fall what hairy traces take in
ĭrsoɟ(d). Kota am tcom nyʊĭk nyi-ĭmĭk(i) am wʊs tcʊkaitam ʊtatk'
throw. It was there before seen my relatives there all prompt one felt
am pi-ĭtcivĭx tcʊ. Kota hodon takĭŏ tcʊt ta-ak iakʊrskaipʊny akit.
there not allow each other see. It was sunset direction from flew here told fall me told.
Hʊmakâ rsakĭk isĭpĭtcimĭm tcoĭ-ĭk am âsûtakowoĭm tcoĭ-ĭk am âsûta-
One canyon turn like there end of hill touch may like there may be
hama tcoĭ-ĭk. Avaot kʊs kâmak(ĭ) tcokŭt makai kontak hap tcoi-ĭkam
sitting like. It was kind gray owl magician I was that sort
mamtcĭk ap imûk rsârsoa kotap sĭnhâĭ-itam ʊtatk' worsanyĭk wʊkatc
guess there ( ) cry I was friendly felt arose around
pitcĭmĭtahĭmûk ha-akĭa stcohokmomkatc maĭ-ĭrsk ap woak opam tcivĭak
going many darkness with covered there throw home-ward came
nyʊ akĭt. Kotak ʊta hux isikʊĭrsk kʊkiwoa kʊny viapâkʊ-ʊlka.
me told. It was in already stand firmly on stand my sons.
Tcʊwʊɟâ mʊtʊtam o-ofĭk ta-atam ʊwʊpâkĭtk' nʊnyĭk tam ap ʊiawa
Land running birds flying assume form fly on there alight
kavap(ûk)' itcʊʌʊlĭtk' hʊkatc ap inûk ap tatk'. Kaoɟ hʊs tândâm nyʊ
reed lengthen with it there inclose there wrestle. It was kind of white me
piahakŭt kontûk tcʊx ihimtcotk' hʊkatc ap âĭmʊlkatc hokĭt ap tarsk
instrument I was bound go with it there ground his edge there set
hap tâta. Kaoɟ kʊs tcʊtak(ĭ) nyʊ piahakŭt kontak tcʊx ihimtcotk'
that make. It was kind of blue me instrument I was bound pushed
hʊkatc ap âĭmʊlkatc hokĭt ap tarsk hap tâta. Anta am vam hap
with it there haunts his edge there set that make. I there more that
inytcok pia-atco pʊx imyʊ mʊlʊnâkĭ. Kaoɟ taprs katatc kontʊk pʊk
same way as before nothing take me turn around. It was his bow I was catch
ĭm tcʊwʊɟ s'ʊtdaftcotk' kʊrsk kai-ipop. Amtcʊt mamtcʊk am hat-
in land center fall exhausted. There from guess there make

destroying these Apaches I went on, but killed only an old woman.[a] I took their bows and then fell exhausted. Next I sent the swiftest young men to carry home the news of victory to the old men and women. With the news that I bring, the earth, the thunder, the night, the mountain, and the trees rejoice.

You may think this over, my relatives. The taking of life brings serious thoughts of the waste; the celebration of victory may become unpleasantly riotous.

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cotcoa kus tcotcoaatcmakam nyu vipiâpka kota ki-ĭk ap rsârs. Ata
stand kind of swiftest me youths it was four there renewals. They them

mulifkai kai-ĭtc kulĭ vi-ĭkam âks vi-ĭkam. Konyak âĭtc' kus s'ap-
came running notify old man remainder old woman remainder. I was after kind good

tahatkam nyu moa-a oa-atc antavaiĭ oapa. Tak hukatc huk tcuwuɿ
feelings me killing held I was had brought. That with that land

am utą sipuputk' utcu. Tak hukatc stcohokmom am uta sikikĭfk
there in roared self stay. That with it night there in shake

utcu tâta-ak am uta sirsarsafk utcotcoa. O-os tcotcĭm am uta
self stay mountain there in echoed stand. Trees standing there in

simokofk utcotcoa. S'ha-ap hap humsâ ulĭtk" tatcoa nanûkâ tcoi-ĭkam
shaking stand. Way that you thought desire different sorts

inyi-ĭmikĭ kotc humo hap patma tâtan huk paɿ rsâĭka natc apahâpta
my relatives we now that lazy make that bad slave we proper

kaihâkĭm kai-ĭtc.
noise said.

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[a] "An arrow without feathers."

We have come thus far, my brothers. In the east there is White Gopher, who is skillful with his teeth. He was friendly and came to me after coming out to the surface four times on the journey. Looking in all directions he saw that a plan had been formed, in accordance with which he slowly approached the enemy, appearing at the surface four times during the journey. He gnawed the power of the enemy and sank their springs. He saw that the wind of the enemy was strong and he cut it up. He gnawed in short pieces their clouds. They had

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Iat tava tcutcka nanukâ tcoi-ĭkam nyi-ĭmĭk(ĭ). Ava ĭm sia-lĭk
Here we came various classes my relatives. It was in east
takĭŏ ku tânʒâm Tcufhâ. Kotpkʿ hasteo ski-ĭtckatkam kontak hap
direction kind of white gopher. He is what gnawer I was that
tcoi-ĭkam mamtcuk ap imuk rsârsoa kotap sĭnyhâĭ-ikuĭ-itam utatkʿ
sort guess there my cry it was friendly felt
amtcut ku tânʒâm utcohokĭk woak huk âĭtkʿ ap ki-ĭkap
there from kind of white itself darkened lay that after there four
nâ-âkanûk makai nata tcumûk hokĭt an tahiwoa. Am a-ai
appearances magician fire all over edges about sitting. There four
nyunhâk tcum nyuĭk âvak makai vâkĭta tânâttc katc. Kot huk
directions looking then saw it was magician trail whitish lay. That that
âĭtkʿ am ku tântâm utcohokĭk woak huk âĭtkʿ ap ki-ĭkap
after there kind of white itself darkened throw that after there four
nâ-âkanûk ap sûpapak(ĭ) tcumâ-âk nyu âapûta. Âvak tcuwut ap
appearances there slowly covered my enemy. It was land there
katc toa-ak ap kuktcʿ tcom sʿunaki-ĭtc kux u-ulĭt kotak am
lay mountain there standing it hanging standing he believes he was there
sirsâ-ârspaʃ ki-ĭkoamia. Âvak rsârsânûkam rsotak(ĭ) tâta-atc tcom
short bitten off. It was springs waters put it it
sʿunaki-ĭtc wutc u-ulĭt tak am siki-ĭkarsahimûk am sitco-otcpĭt.
hanging laying believes that there continue biting there sink it.
Âvak huwuʃkatc âva tcom tcoviomatkʿ u-ulĭt tak am sirsâ-ârspaʃ
It was wind lay it was it like land thought that there short
ki-ĭkoamia. Âvak tcuaakikatc âva tcom stcova-akûpatkʿ
bitten off. It was clouds his it was it very sprinkle
u-ulĭt tak am sirsâ-ârspaʃ ki-ĭkoamia. Âvak humatckam
he thought that there short bitten off. It was people
huk tam ap âimututam vatcom sku-uk tcu-utc kat
that on there haunts not good dreams he
u-ulĭt tan(d)ulĭm haitco nyuĭtatkʿ u-ulit tak am sirsâ-ârspal
thought brightly something false seeing he thought that there short
ki-ĭkoamia. Âvak humatckam huk tam ap âimututam
bitten off. It was people that on there haunts
vatcom sʿapukam kat kia-atkam, rsul ta-atam vapu(k)
not best bow string, straight flying reed

dreams and shining power, good bows and arrows, but all these he cut in pieces. Gathering all their possessions, he brought them with him, rising to the surface of the ground four times on his journey. Leaving all that he brought, he went home, making four appearances at the surface on his way. The land roared and rejoiced with him for what he had done.

In the south is Blue Coyote, upon whom I called for assistance. He was friendly to me and came running, circling around, howling, four times on the journey. When he arrived he approved of my plan. He cast his blue darkness upon the enemy and slowly reached their place, after circling around, howling, four times on the way. He sucked in the power of the enemy, their springs, trees, winds, clouds, dreams,

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tcoi-ĭta rsakûtcĭtkʼ u-ulit tak am sirsâ-ârspal ki-ĭkoamia. An
clean had grasped he thought that there short bitten off. About

wukatc katcĭm nanûkâ tcoi-ĭtckatc si-ĭnasĭk supapak(i) kaʌoɟkatkʼ
around lay different belongings gathered slowly ground

puk opam ha-akok i-iwoa. Ap opam ku tântâm utcohokĭk
took homeward turn around. There homeward kind of white itself darkened

woak âĭtkʼ ap ki-ĭkap mâ-âkan makai nata tcumûk hokĭt am
placed after there four appearances magician fire all edges over about

takûtâ. Smakaitkam â-âtam sivakssĭtk tam tarsûwoa. Vi-ĭkam
release. Expert magician people a prepared place with something spread to sit on top sat. Remainder

supapak(i) kaʌoɟkatkʼ pux am opam ku tânɟâm utcohokĭk woak
slowly grouped catch there homeward kind of white his darkness throw

âĭtkʼ ap ki-ĭkap mâ-âkan uʌâĭ-ĭkŭt tcumâ-â. Huk hukatc
after there four appearances his bed come. That with

sʼhai-ĭtcokm utatkʼ kot huk hukatc huk tcuwuɟ am uta sipuputk
conceit felt he that with that land there in roar

utcu. Ĭm katcĭm takĭŏ kus tcutak(i) tuwumukaɟ wotʼpkʼ hastco
placed. In laying direction kind of blue our with to expert what

tcokok sʼhokimutam kontak hap tcoi-ĭkam mamutcuk ap imûk
made carnivorous I was that sort guess there my

rsârsoa kotap sĭnyhâĭ-ikuĭ-itam utatkʼ amtcut kus stcutak(i)
cry it friendly felt there from kind of blue

utcohokĭk woak huk âĭtkʼ ap ki-ĭkhâ sikâl mutkʼ hihinakhĭmûk
his itself darkened throw that after there four round run shouting

makai nata tcumûk hokĭtan tcuɟakiwoa. Am a-ai nyunhâk tcum
magician fire everywhere edges thud. There four directions looking then

nyuĭ. Âvak makai vâkĭta tânâtcʼ katc. Kotuk âĭtkʼ kus stcutak(i)
saw. It was magician trail whitish lay. It was after kind of blue

utcohokĭk woak huk âitkʼ ki-ĭkhâ sikâl mutkʼ hihinakĭmk ap
his itself darkened throw that after four times around run shouting there

supapak(i) tcumâ-âk nyu â-aputa. Âvak tcuwuɟ ap katc
slowly covered me enemy. It was land there lay

toa-ak ap kuxtc tcom sʼunaki-ĭtc kux u-ulĭt kotak am sihafw(u).
mountain there stand it hanging stand he thought it was there inhale.

Âvak rsârsanûkam rsorsok(ĭ) tâta-atc tcom sʼunaki-ĭtc wukatc os
It was springs waters placed it hanging round tree

ap kukam tcom sʼunaki-ĭtc tcotck u-ulĭt tak am sihâfw(u).
there standing it hanging stand he thought that there inhale.

Âvak huwuɟkatc âva tcom tcoviomatkʼ u-ulĭt tak am sihafw(u).
It was wind his it was it cause to blow thought that there inhale.

and magic power, also their bows and arrows. Gathering up their other possessions he turned toward home. Enveloped in his blue darkness he came to me, circling around, howling, four times on the journey. Leaving all that he brought, he went home, traveling through his blue darkness and circling around, howling, four times on the way. He rejoiced at his deeds, jumping in the four directions, and in the morning all rejoiced with him.

In the west is Black Kangaroo Mouse, an expert thief, upon whom I called for help. He was friendly to me, and enveloped me in his mantle of darkness, making four halts on the way. After surveying the situation he approved of my plan. Sending forth his black darkness he pushed his way through it to the enemy, making four stops on the way. He opened the sack containing the most prized magic prop-

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Âvak tcuvakikatc tcom stcova-akupatkʿ u-ulĭt tak am sihafw(u).
It was clouds his it sprinkle thought that there inhale.

Âvak humatckam huk tam ap âimututam vatcom sku-uk
It was people that on there haunts it was good

tcu-utckatvk u-ulĭt tanɫam haĭtco nyuitatkʿ u-ulĭt tak am sihâfw(u).
dream thought white thing seen thought that there inhale.

Âvak humatckam huk tam ap âĭmutuɫam vatcom sʿapukam kat
It was people that on there haunts it was best bow

kia-atkam rsuɫ ta-atam vapukʿ tcoi-ĭta rsakutcĭtkʿ u-ulĭt tak
string straight flying reed clean had grasped he thought that

am sihâfw(u). An wukatc katcĭm nanûkâ tcoi-ĭtckatc sinasĭk
there inhale. About round lay different belongings gathered

supapak(ĭ) kawoɫkatkʿ puk ha-ahâk i-iwoa. Ap opam kus
slowly grouped take turned back. There homeward kind of

stcutak(ĭ) utcohokĭk woak huk âĭtkʿ ap ki-ĭkhâ sikaɫ mutkʿ
blue itself darkened throw that after there four round run

makai nata bokĭt an tâkûta. Smakaitkam â-âtam isivakssĭtk
magician fire edge about release. Expert musician people a prepared place with something spread to sit on

tam tarsuwoa. Vi-ĭkam supapak(ĭ) kawoɫkatkʿ puk opam kus
on placed. Remainder slowly grouped take homeward kind of

stcutak(ĭ) utcohokĭk woak âĭtkʿ ap ki-ĭkhâ sikaɫ mutkʿ
blue itself darkened throw after there four round run

hihinakhimûk uâĭkŭt tcumâ-â. Hukatc sʿhai-ĭtcokam utatkʿtcʿ am
shouting his bed covered. With conceit felt there

a-aip tcuɫakiwoa. Hukatc huk sia-aɫ tcotcĭm am uta
all directions thud. With that east standing there in

sirsarsafuktcʿ tcotc. Ĭm hotĭnyĭk takĭŏ kus tcok nahakĭâ.
echoed stand. In sunset direction kind of black kangaroo mouse.

Wotpk hastcos uskam kontak hap tcoĭ-ĭkam mamutcuk ap imûk
Expert something robber I was that sort guess there my

rsârsoa kotak sĭnybâĭ-ikuĭ-itam utatkʿ amtcut kus stcok utcohokĭk
cry it was friendly felt there from kind of black itself darkened

woak âĭtkʿ ap ki-ĭkhâ tahiwoak makai nata tcumûk hokĭt an
throw after there four sitting magician fire covered edges about

tahiwoa. Am a-ai nynuhâk tcom nyuĭk âvak makai vâkĭta
sit. There all directions looking then saw it was magician trail

sitânâɫûtc katc. Kot huk âĭtkʿ kus stcok utcohokĭk woak
brightly lay. It that after kind of black itself darkened throw

huk âĭtkʿ am ki-ĭkhâ tahiwoak ap supapak(ĭ) tcumâ-â huk
that after there four sitting there slowly covered that

erty of the enemy, though the sack was tied in many places, and took from it the blue necklaces, blue earrings, down, and everything of that nature before turning homeward. Enveloped in his yellow darkness he reached me after four rests. Leaving all at the council ground he went to his home, halting four times on the way. Rejoicing, he jumped about, and the night rustled like the fluttering of leaves in sympathy with him.

I called on Owl, above, for assistance. He was friendly to me and came, sailing four times on the way. He looked about him and saw my plan. In accordance with this he slowly reached the enemy after sailing four times. He cut the power of the enemy, their springs, their trees, and their dreams. He grasped their bows and arrows and

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nyu â-apûta. Âva ĭt noarsamĭtc vatcom ha-akĭa utam
my enemy. It was this bag was it many on top of another
hawolk u-ulĭt tak am siki-ĭkassahimûk âĭtk' am mawoak am
tied he thought that there bit off after there reach there
puĭ kus stcutak(ĭ) payoka tcukĭtaɫakatc. Kus sku-uk vi-ĭk
take kind of blue necklace hoard. Kind of good down
tcukĭtaɫakatc. An wukatc katcĭm nanûkâ tcoĭ-ĭtckatc si-inasĭk
hoard. About round laying different belongings gathered
supapak(ĭ) kawoɫkatk' puk opam ha-ahâk i-iwoa. Ap opam kus
slowly grouped take homeward turned back. There homeward kind of
stcok utcohokĭk woak âĭtk' ap ki-ĭkhâ tahiwoak makai nata tcumûk
black itself darkened throw after there four sitting magician fire everywhere
hokit an takĭtâ. Smakaitkam â-âtam isivakûsĭtk' tam tarsuwoa.
edges about release. Expert magician people seat on placed.
Vi-ĭkam supapak(ĭ) kawoɫkatk' puk am opam kus stcok utcohokĭk
Remainder slowly grouped take there homeward kind of black itself darkened
woak âĭtk' am ki-ĭkhâ tahiwoak uʌâĭkŭt tcumâ-â. Hukatc s'haitcom
throw after there four sit his bed covered. With conceit
utatk' am a-aip tahiwop kuk hukatc stcohokomom am uta si
felt there all directions sits that with darkness there in
rsamoñtc katc. Âva ĭt tam kus stcohokomom sikăllktc katc. Âvak
rustling lay. It was this on kind of darkness round lay. It was
uta s'iâ-âmp uolĭntc' kutânɫâm u-ut vaohotam kontak hap tcoĭ-ĭkam
in right being held kind of white blood sucker I was that sort
mamûtcuk ap imûk rsârsoâ tap sĭnyhâĭ-ĭkuĭ-ĭtam utatk' amtcut
guess there my cry friendly felt there from
ki-ĭkhâ ikâmalwoak makai nata tcumûk' tam unakia. Am a-ai
four thin fly magician fire covered on hang. There all
nyunhâk tcom nyuĭk âva makai vâkĭta tânâttc katc. Tuk âĭtk'
directions looking then saw it was magician trail brightly lay. That after
am ki-ĭkhâ ikâmalwoak ap supapak(ĭ) tcumâ-âk huk nyuâpûta.
there four thin fly there slowly covered that me enemy.
Âvak tcuwuɫ katc toa-akatc tcom s'unaki-ĭtc kuk u-ulĭt tak am
It was land lay mountain it hanging stand thought that there
sirsâ-ârspâ[ki-ĭkomia. Rsârsânûkam rsorsok(ĭ) tâtoatc, os kursatc
very short bit off. Springs waters his placed, tree plant his
tcotcom sĭs unaki-ĭstc u-ulĭt tak am sirsâ-ârspâ[ki-ikomia.
standing very hanging thought that there short bit off.
Humatckam huk tam ap âimutuɫam vatcom sĭs ku-uk tcutckatk'
People that on there haunts was it very good dreamed
u-ulĭt tak am sirsâ-ârspâ[ki-ikomia. Vatcom s'apukam kat kiatkam
thought that there very short bit off. Was it good-best bow stringed

bit them in twain. He bit off their flesh and sinews, and in their bones made holes. From the things collected he made a belt from a bow-string and turned homeward. He came through his gray mist in four flights. Leaving all that he had secured in my behalf, he reached his home in four flights. At early dawn he rejoiced in his success and the darkness rattled with him.

You may think this over, my relatives. The taking of life brings serious thoughts of the waste; the celebration of victory may become unpleasantly riotous.

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rsuı ta-atam vapûk(u) tcoĭ-ĭta rsaktcĭtk' u-ulĭt tak am sirsâ-ârspâ
straight flying reed clean had grasped thought that there very short

ki-ikomia. Am vak huk tcohokatc ahava ki-ikomia. Katatc isi
bit off. There enter that flesh his then bit off. Bow his very

kiahontûk â-âtc kahaitcutckarsk ap koapatk' ap kĭrsa-atk' ap opam
relaxed bones his perforate there wig there bark dress there turn

ku tânıâm utcohokĭk woak huk âĭtk' ap ki-ĭkhâ ikâmalwoak svaosĭm
kind of whitish itself darkened throw that after there four thin fly damp

isĭtckĭ. Makai nata tcumûk' hokĭt an takĭtâ. Smakaitkam â-âtam
rattling. Magician fire cover edges about release. Expert magician people

isivakssitk tam tarsuwoa. Vi-ĭkam supapak(ĭ) kawoıkatk puk am
a prepared place with something spread to sit on on sitting. Remainder slowly grouped take there

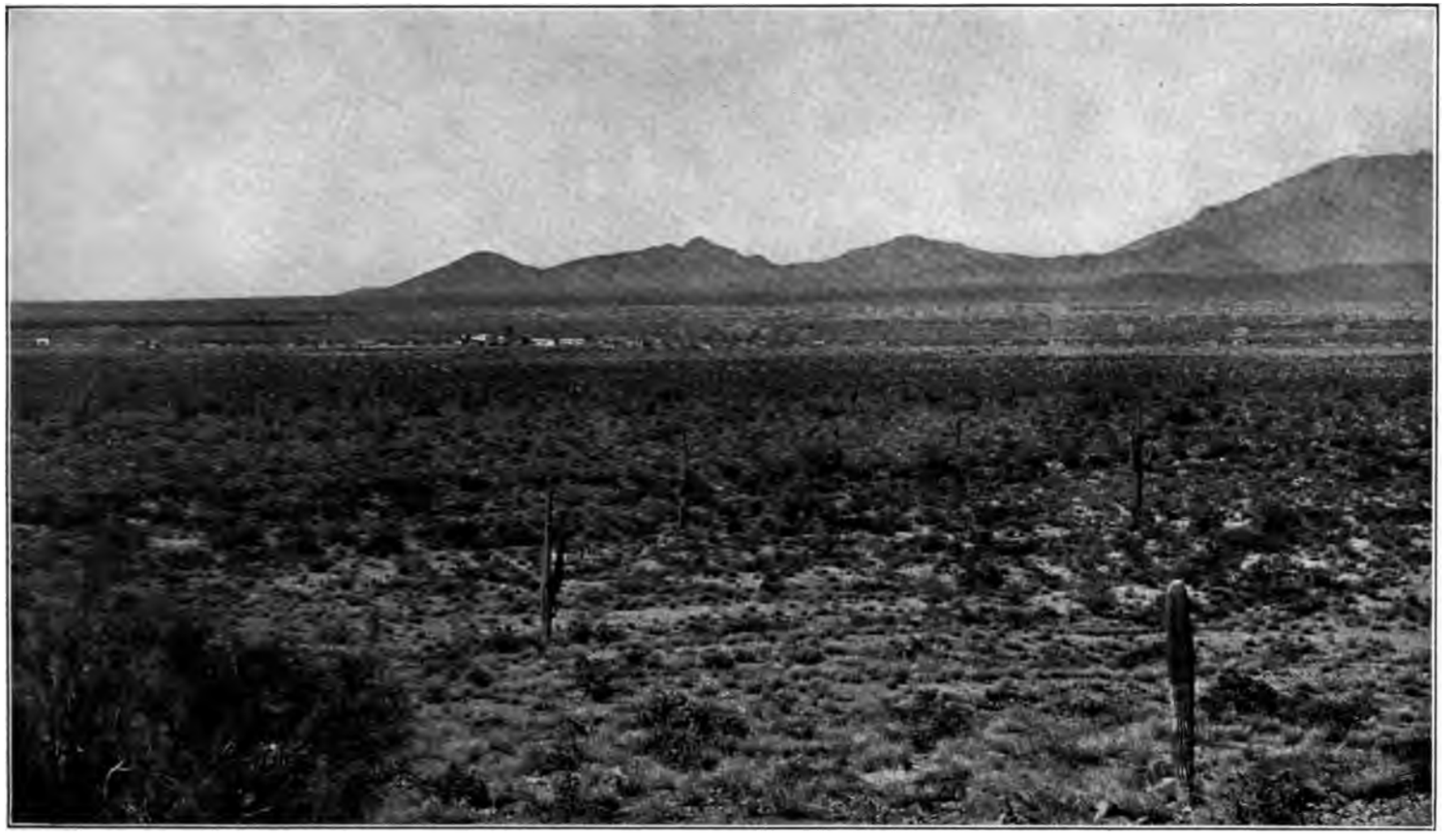
opam ku tânıâm utcohokĭk woak âĭtk' am ki-ĭkhâ ikâmuluwoak
homeward kind of whitish itself darkened throw after there four times thin fly

suvaosĭm isĭtckĭm uâĭkût tcumâ-â. Hukatc s'haĭtcokûm utatktc
damp rattling his bed arrive. With conceit felt

am a-ai tai-ĭnyok âva hukatc stcohokomom am uta sistic'ktckatc.
there all directions flying it was with darkness there in rattling lay.

S ha-ap hapûk' humsa ulĭtk' tatcoa nanûkâ tcoĭkam nyi-imĭkĭ kotc
Way that you think plan different class my relatives we

humo hap patmatâtan huk pat rsâĭka natc apahâpta kaihâkĭm kaĭtc.
now that lazy make that bad slave way proper noise said.



SACATON

a ANTONIO AZUL

b TCO'KÚT NAK, HOLDING A CALENDAR STICK

c KÂEMÂ-Â

THREE OF THE AUTHOR'S PIMA INFORMANTS

CASA GRANDE RUIN

a SANTAN (FROM THE WEST)

b RUIN BELOW SANTAN (FROM THE WEST)

c SWEETWATER (FROM THE SOUTHWEST)

THREE PREHISTORIC PIMA RUINS

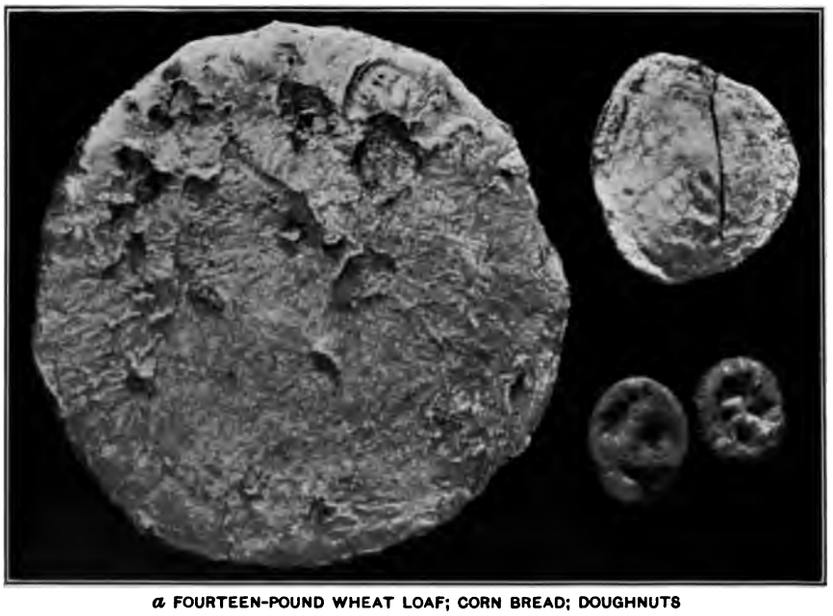
a CASA BLANCA (FROM THE WEST)

b SCHOOLHOUSE RUINS

CASA BLANCA AND RUINS OF FIRST SCHOOLHOUSE

b ARROW-BUSH INCLOSED KITCHEN

c FIREPLACES



a FOURTEEN-POUND WHEAT LOAF; CORN BREAD; DOUGHNUTS

PIMA BREAD, KITCHEN, AND FIREPLACES

a IRONWOOD (OLNEYA TESOTA)

b CAT'S CLAW (ACACIA GREGGII)

IRONWOOD AND CAT'S CLAW

a HA'NÛM CACTUS (OPUNTIA ARBORESCENS)

b SAGUARO FOREST (CEREUS GIGANTEUS)

TWO VARIETIES OF CACTUS

a CREOSOTE BUSH (LARREA MEXICANA) *b* OKATILLA (FOUQUIERA SPLENDENS)
c SAGUARO (CEREUS GIGANTEUS), IN BACKGROUND

d UNBRANCHED SAGUARO (CEREUS GIGANTEUS)

CHARACTERISTIC DESERT VEGETATION

a MESQUITE (PROSOPIS VELUTINA)

b PALOVERDE (PARKINSONIA TORREYANA)

MESQUITE AND PALOVERDE

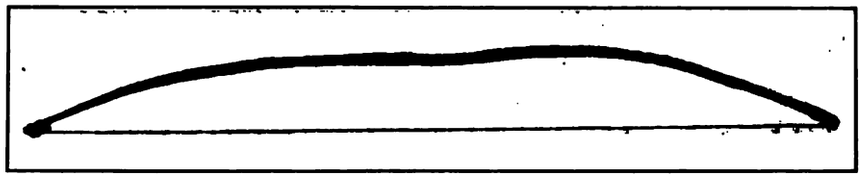
a PIMA FIELDS

b KWAHADK' VILLAGE

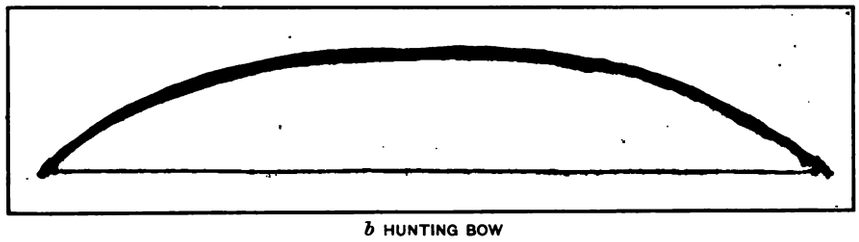
c HOHOKAM FIELDS

FIELDS AND VILLAGE IN PIMERÍA

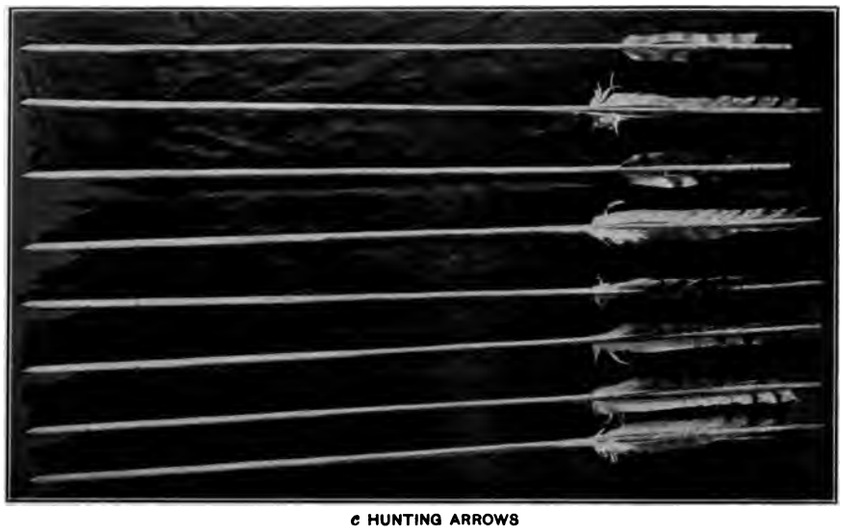
CHOLLA CACTUS (OPUNTIA BIGELOVII ENGELM.)



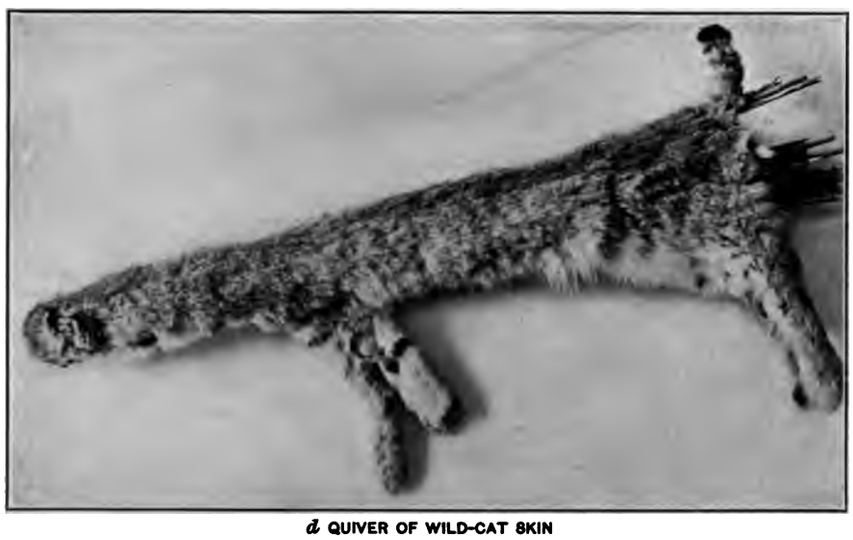
a WAR BOW



b HUNTING BOW



c HUNTING ARROWS



d QUIVER OF WILD-CAT SKIN

PIMA WEAPONS

a *b* *c* *d* *e*

A'MÍNA

a UPPER SURFACE OF RIDING SADDLE

c HORSEHAIR CINCH

b UNDER SURFACE OF RIDING SADDLE

RIDING SADDLE AND CINCH

a SKÂSŎWALĬK HILLS CLAY PIT

c CLAY PIT NEAR THE GILA

b SCREENING CLAY AT PIT

CLAY PITS

a ROLLING CLAY

b SMOOTHING SURFACE AFTER APPLYING COIL

c SUPPORTING VESSEL ON LOOSE SAND

d DECORATING EXTERIOR

PIMA WOMAN MAKING POTTERY

b BEAN POT

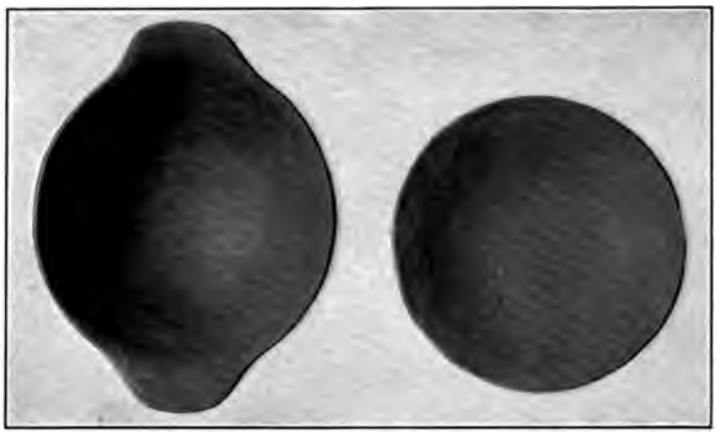
a COOKING POT

c CANTEEN

d CANTEEN

e DOUBLE-NECKED CANTEEN

POTTERY—POTS AND CANTEENS

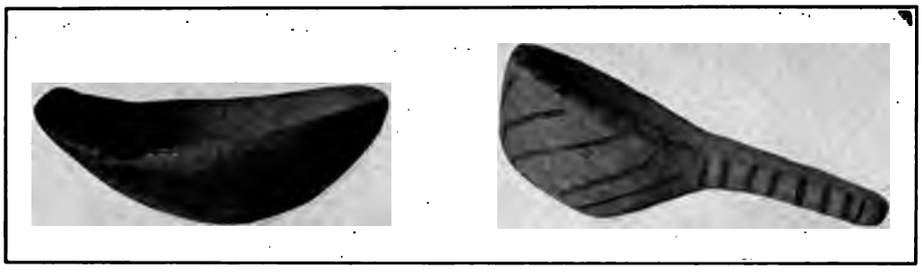


a PARCHING PAN *b* TORTILLA BAKING PLATE

d EFFIGY VASES

c PLATE *e* CUP *f* PLATE

POTTERY—PAN, PLATES, VASES, CUP



a ANCIENT SPOON *b* NEW SPOON

c BOWL

d COILED BOWLS

e DECORATED BOWLS

POTTERY—SPOONS AND BOWLS

a ARROW BUSH (PLUCHEA BOREALIS)

b BACCHARIS GLUTENOSA

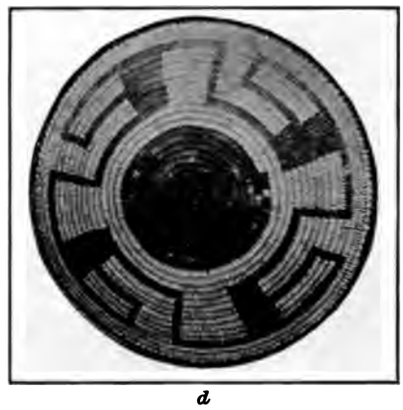
c CRUCIFIXION THORN (HOLOCANTHA EMORYI) SURROUNDED BY SALTBUSHES

CHARACTERISTIC DESERT VEGETATION

a

b

c



d

e

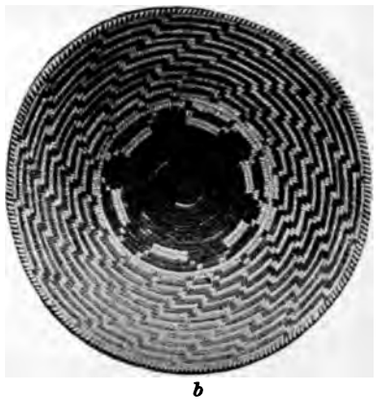
f

g

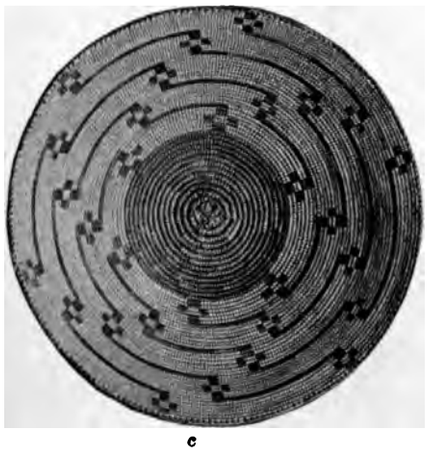
h

BASKETS DECORATED WITH THE FRET

a



b



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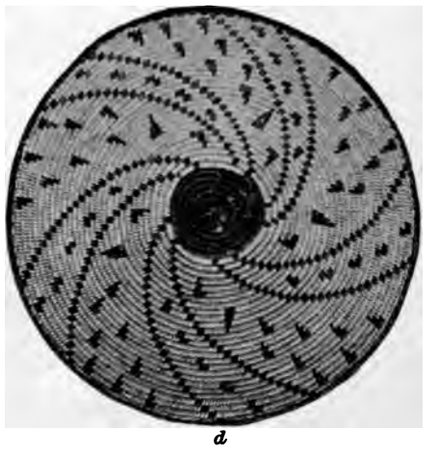
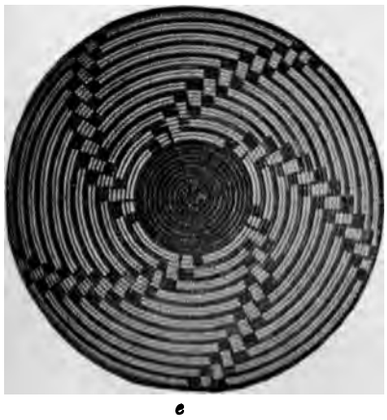


d



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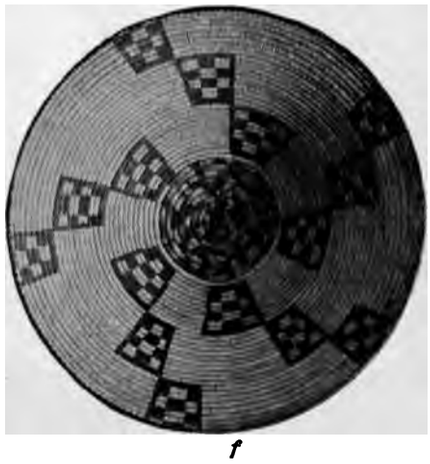


f

BASKETS DECORATED WITH THE FRET

a

b

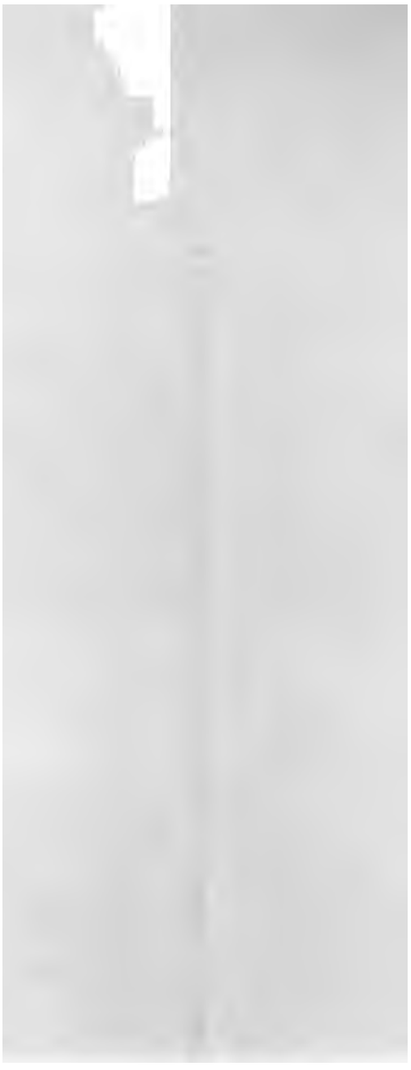
c

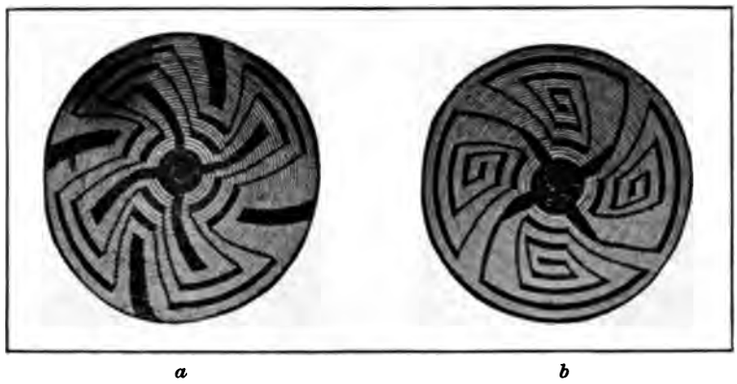
d

e

f

BASKETS





a *b*

c *d*

e *f*

BASKETS

a

b

c

d

e

f

BASKETS

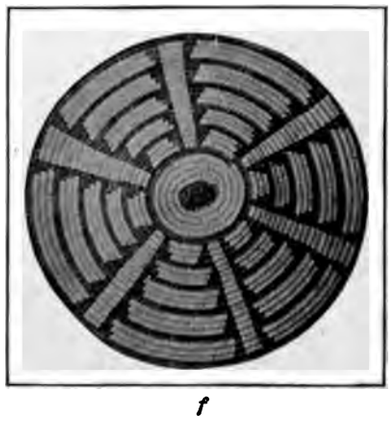
a

b

c

d

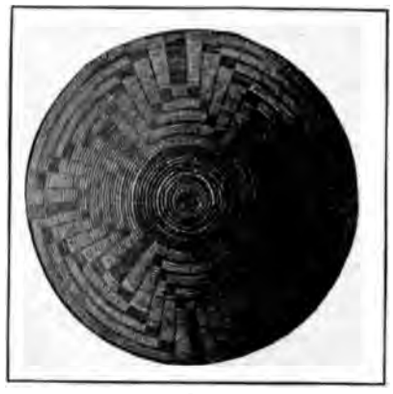
e



f

BASKETS

a



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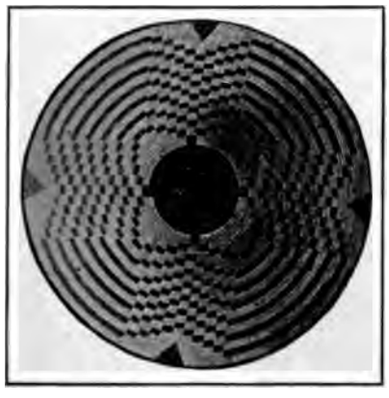

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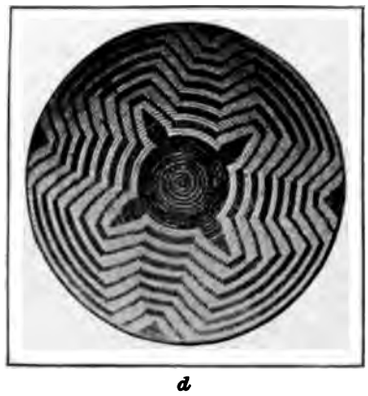

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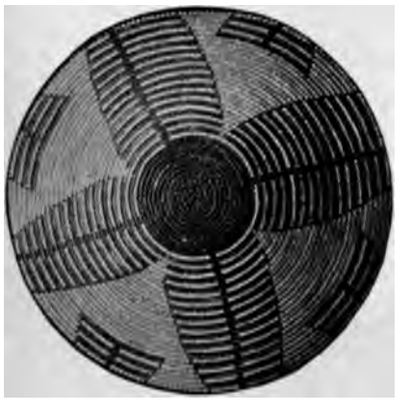


e

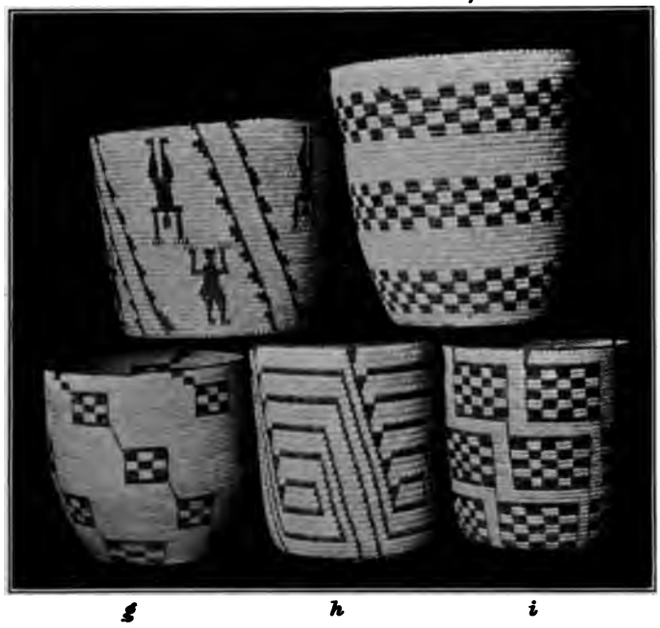
f

BASKETS DECORATED WITH FLOWER-LIKE PATTERNS

a *b*

c *d*

e *f*



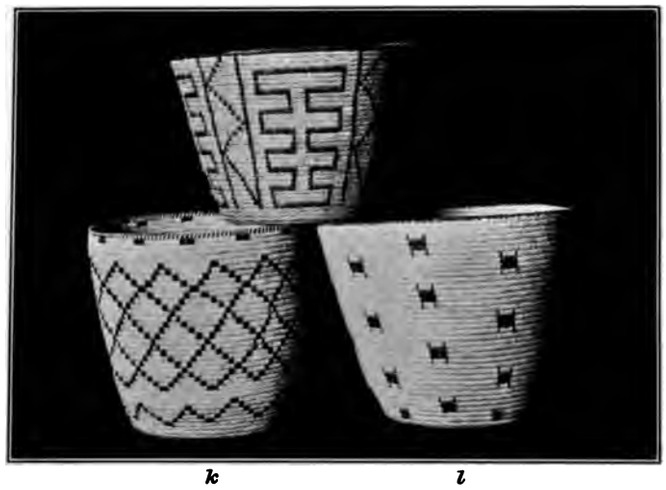
g *h* *i*

BASKETS, UPRIGHT FORMS

a *b* *c* *d* *e*

f *g* *h* *i*

j

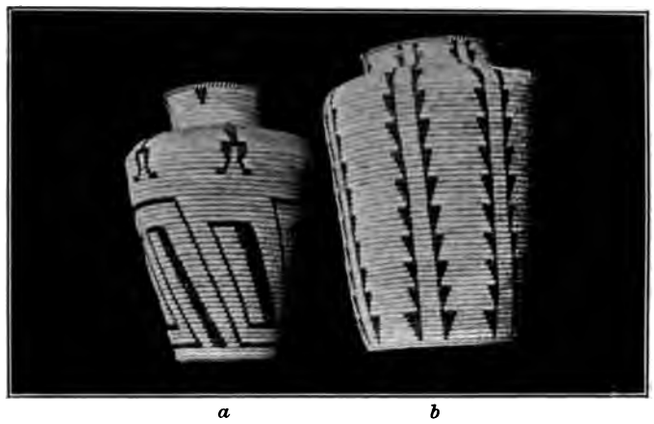


k *l*

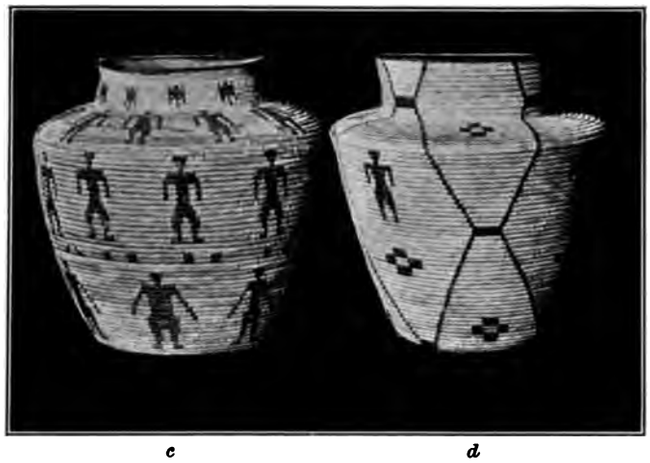
m *n*

o

BASKETS, UPRIGHT FORMS



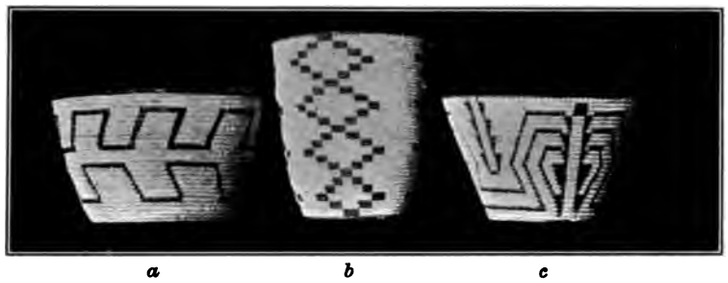
a *b*



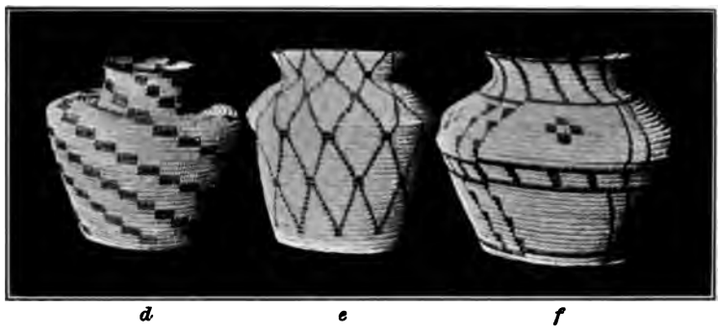
c *d*

e *f*

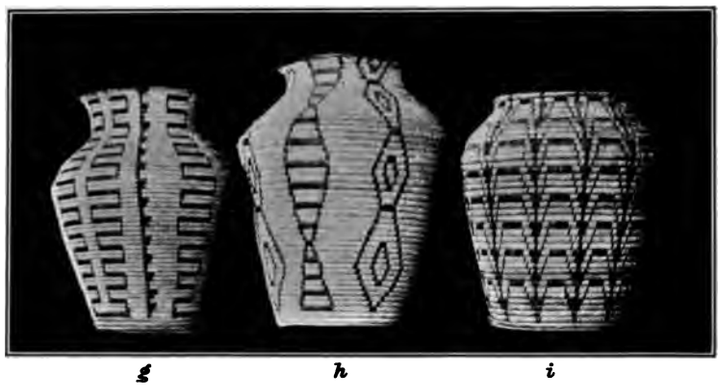
BASKETS, UPRIGHT FORMS



a *b* *c*



d *e* *f*



g *h* *i*

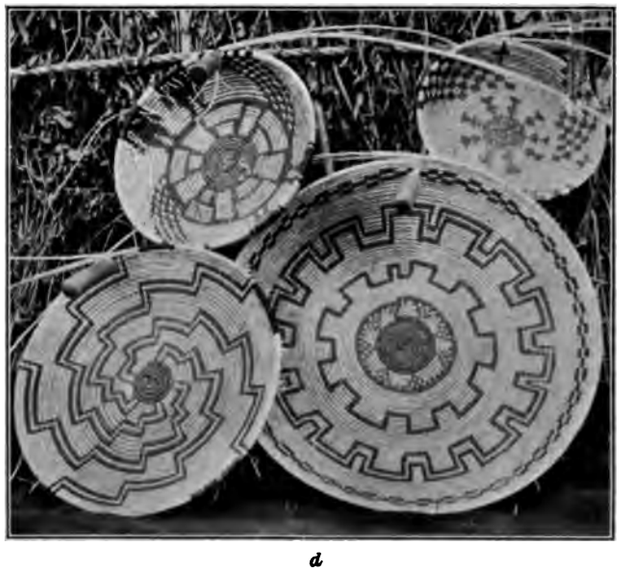
j *k* *l*

BASKETS, VARIANTS OF UPRIGHT FORMS

a

b

c



d

YAVAPAI BASKETS

a LOADING THE KIÅHÅ

b RISING WITH THE LOAD

c THE LOAD IN POSITION

d REMOVING THE LOAD

WOMAN WITH KIÅHÅ

a FRAMEWORK OF HOUSE

d SHED FRAME

b BLANKET DOOR

f STOREHOUSE AND WAGON SHED

c EARTH-COVERED HOUSES

e SHED DOOR

HOUSES AND SHEDS

ARROW-BUSH KITCHEN AND PIMA WOMAN

a

b

PIMA MAN, SHOWING COSTUME WORN IN HOT WEATHER

a

b

d

c

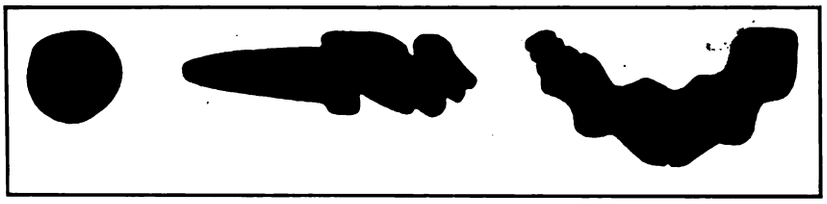
PIMA WOMEN, SHOWING MODES OF HAIRDRESSING AND FACE PAINTING

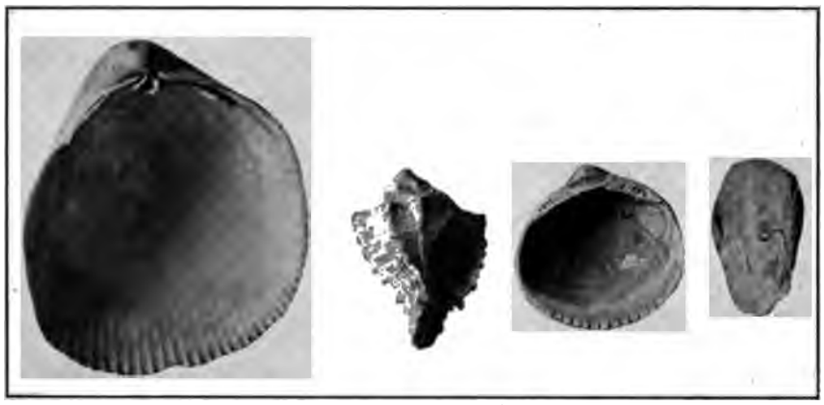
a CEMETERY AT SACATON

b CEMETERY AT STATANYIK

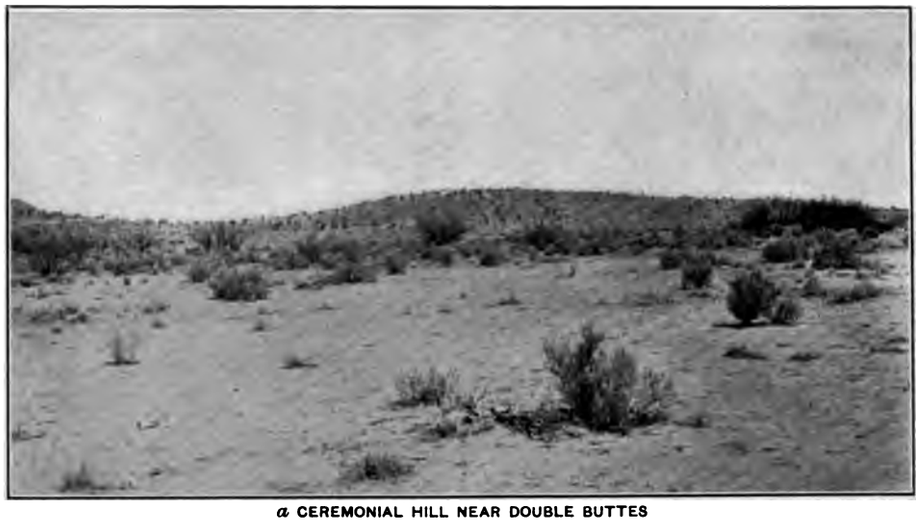
c GRAVE AT STATANYIK

CEMETERIES AND GRAVE





OBJECTS FROM HÂHÂTESUMIEHÎN SHRINE

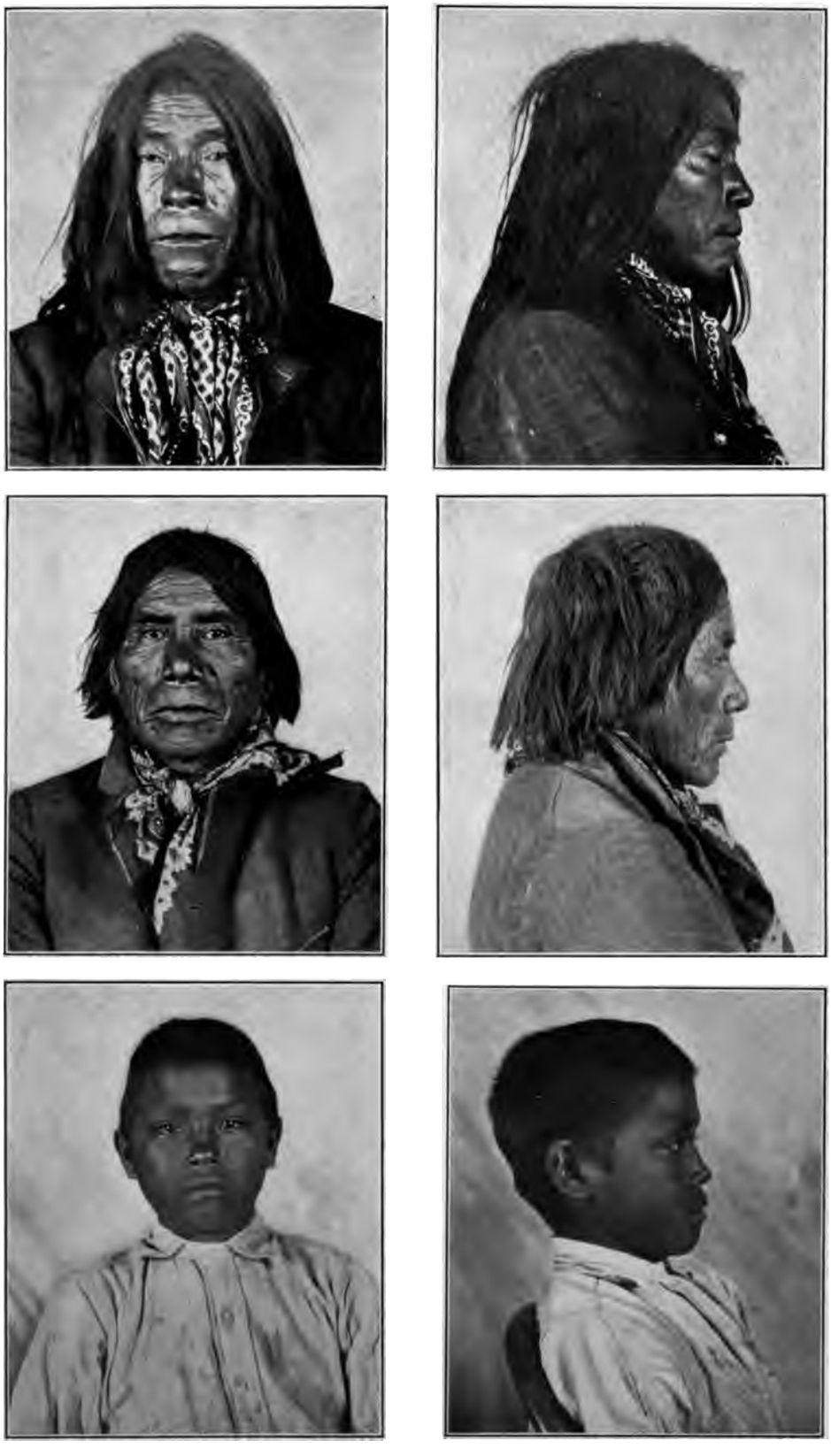


a CEREMONIAL HILL NEAR DOUBLE BUTTES

b HÂHÂTESUMIEHÎN SHRINE

c SHRINE NEAR DOUBLE BUTTES

CEREMONIAL HILL AND SHRINES



PIMA MEN AND BOY

a PANHOP

b MARICOPA ANTOINE

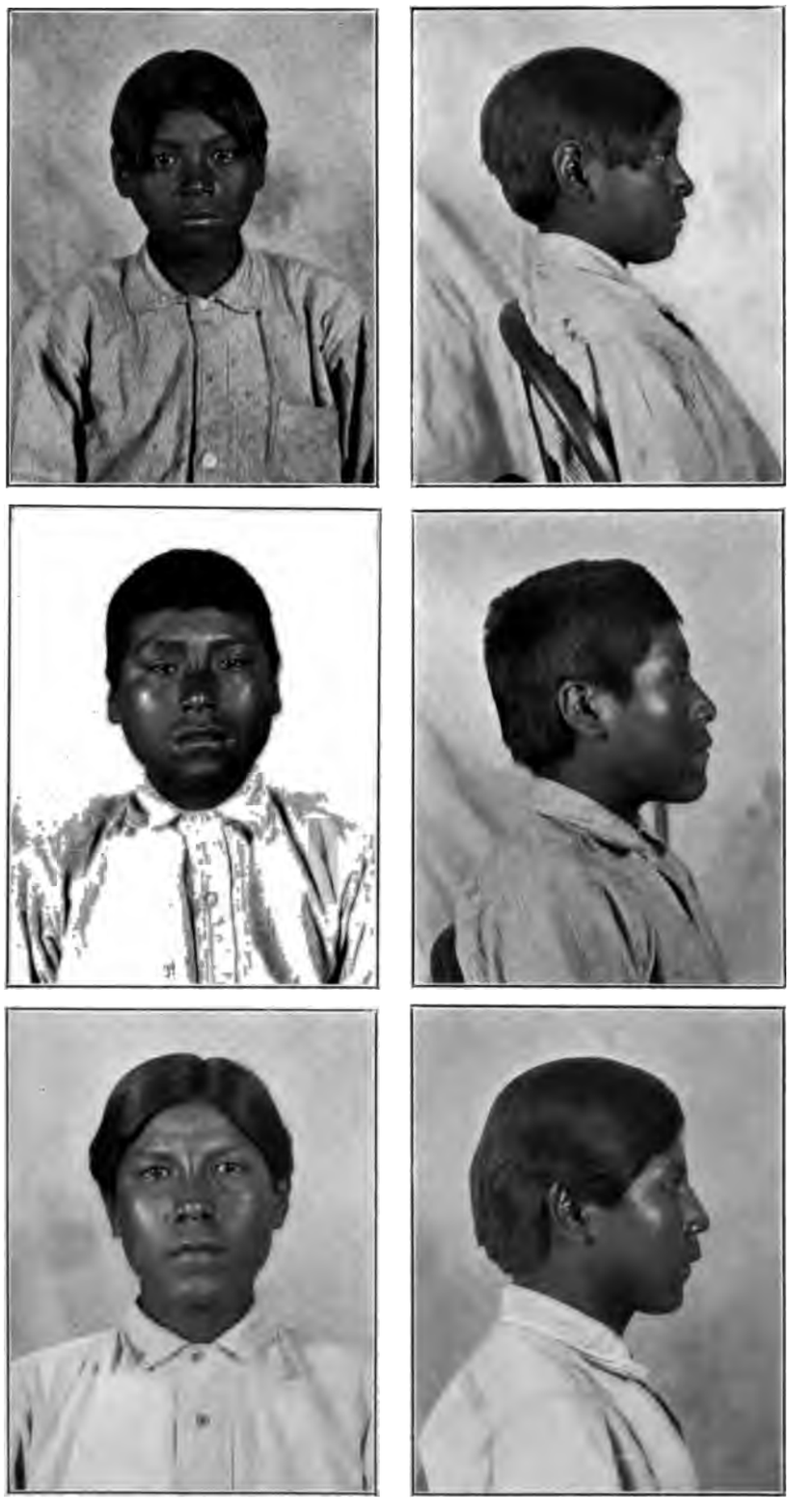
c KOSPITO

ELDERLY PIMA MEN

a VI-CÛK-RÂ-E-HÎN

b KÂ'MÂL TKÂK, THIN LEATHER

PIMA MEN



PIMA BOYS

PIMA BOY AND WOMEN

SOCIAL CONDITION, BELIEFS, AND LINGUISTIC RELATIONSHIP OF THE TLINGIT INDIANS

BY

JOHN R. SWANTON

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SOCIAL CONDITION, BELIEFS, AND LINGUISTIC RELATIONSHIP OF THE TLINGIT INDIANS

By John R. Swanton

INTRODUCTION

The material contained in this paper is a portion of the results of about two months' work at Sitka, Alaska, between January and March, 1904, and about one month at Wrangell, March to April of the same year. The remainder of the material gathered at that time consists principally of texts in the native language with translations and myths recorded in English. The chief objects of the investigation were: (1) To obtain a sufficient number of Tlingit myths to round out the collections of tales from the north Pacific coast; (2) to collect enough linguistic material for a careful study of the Tlingit language, with the special object of comparing it with that of the Haida, with which some sort of relationship was believed to exist and with which the writer already had considerable acquaintance; and (3) to add as much as possible to our knowledge of Tlingit ethnology generally. This paper comprises most of the notes made with the third purpose in view, and the results of the writer's comparison of Tlingit and Haida. Very little attention is given to the arts, the industries, and the food quest, partly because these have been treated very fully in Krause's monumental work, Die Tlinkit Indianer (Jena, 1885), and in one particular, that of basketry, in "The basketry of the Tlingit," by G. T. Emmons, in volume III of the Memoirs of the American Museum of Natural History, and partly because these are not so readily studied in connection with language and myths, and indeed require independent investigation.

The phonetics used are almost identical with those employed by Professor Boas, the writer, and others in connection with the work of the Bureau of American Ethnology and the American Museum of

Natural History, upon the Pacific coast, and are as follows, the arrangement, however, being the writer's own:

	Sonants	Surds	Fortes	Spirants	Nasals	Semi-vowels and breathing	Vowels
Labials	(Only in foreign or a few onomatopoetic words)					w	ū, ō, ᵃ, ᵒ
Gutturals:							
Vocalic-velar	y̧						
Velars	g	q	q!	x		h	ā, a, ʌ, ô
Palatals	g	k	k!	x̧		y	ī, ē, i, e
Anterior-palatals			k·!				
Dentals	d	t	t!	(s)	n		
Sibilants		s	s!	c			
Dental-sibilants	dz	ts	ts!				
Dental-sibilant-aspirates	dj	tc	tc!				
Dental liquids	ɮ	ɬ	ɬ!	ł			

x is German ch in ach!, x̧ almost like German ch in ich. ɮ is nearly the same as dl and ɬ as tl or kl, while ł is an aspirated sound represented best perhaps by hl. dj is English j, tc English ch in church, and c English sh. The velars are similar to the palatals, but pronounced farther back in the throat, and the vocalic-velar farther back yet. The fortes are pronounced explosively or sometimes with a pause following. The characters ᵃ and ᵒ represent barely formed u and o sounds.

TLINGIT SUBDIVISIONS

At the present day tribes speaking Tlingit (or Koluschan) occupy all of the "pan-handle" of Alaska, coast and islands, except the southern third of Prince of Wales island and the smaller islands immediately to the southwest of it, and extend westward along the coast as far as Copper river. The people on Taku and Stikine rivers camp and travel some distance into British Columbian territory, while the Athapascan Indians in turn camp well over into Alaska and come down to the coast towns to trade or visit. The Tägish, a purely interior people living in British Columbia north of the Chilkat, are said to speak a dialect of this language; but, if that is indeed the case, it has probably been adopted by them in comparatively recent times. An Eskimo tribe, the Ugalakmiut, living just east of the mouth of Copper river, has been so far modified by contact with the Yakutat as to be enumerated with the Tlingit tribes proper, though historically it has no right to that position.

Leaving these two peoples out of consideration, fourteen geographical groups may be recognized, as follows: The Tongas (Tangā'c qoan), Sanya or Cape Fox Indians (Sā'nya qoan), Henya (Hē'nya qoan), Kuiu (Kuiu qoan), Kake (Kēq! qoan), Sumdum (S!aodā'n qoan), Stikine (Staq!hī'n qoan or Cq!ʌt qoan), Taku (T!āq!ᵒ qoan), Auk (Āk!ᵃ qoan), Hutsnuwu (X̧ūts!nuwū' qoan), *Huna (Hū'na qoan)*, Chilkat (Djîlqā't qoan), and Yakutat (Yaqᵘdā't qoan or Łaxayî'k qoan). The Hehl (Xēł qoan), now at Wrangell, once formed an independent group on Revillagigedo island.

Each of these divisions or tribes had at least one winter village and a section of coast on which the people camped every summer or back of which they hunted in winter. The number of permanent towns as well as their location varied considerably from time to time. In the case of the Chilkat there were four of these, while the people of Killisnoo were formerly divided between two.

The following is a list of the Tlingit towns, ancient and modern, that were enumerated to the writer, with the division to which each belongs, though it must by no means be supposed that this exhausts the number:

TAngā'c	Tongas
Ǫāc	Sanya
TA'qdjik-ān (Tuxican)	Henya
ŁAwā'k (Klawak)	Henya
CAxā'n (Shakan)	Henya
Kuiu	Kuiu
Kēq! (Kake)	Kake
S!aodā'n	Sumdum
Qātcxa'na-āk!ᵘ, "Human-hip-lake" (Wrangell)	Stikine
Qāłtcal!-ān (tcal!="alders") (Old Wrangell)	Stikine
S!ikanasā'nk!i-ān	Taku
T!āqᵒq!aka-ān, "Town-at-the-mouth-of-Taku-inlet"	Taku
Ā'ntcgałtsu	Auk
Tsa'ntik!i-hīn (Juneau)	Auk
Nałtū'ck-ān, "Town-on-outside-of-point"	Killisnoo
Āngū'n, "Right-across-the-town," signifying that a road runs across a narrow strip of land from behind the town to some body of sea water.	Killisnoo
Gaot!ā'k-ān, "Drum (or Bell) town"	Huna
Lucā'cak!i-ān, "Sand-hill-town"	Huna
Kaq!anuwū'	Huna
Ẋakanuwū'	Huna
Gonā'xo (at the mouth of Alsek river)	Huna
Ǫathī'ni, "Silver Salmon creek" (north of Dry bay)	Huna
Lākᵘ-ān "Renowned town" (Klukwan)	Chilkat
Qātq!wā'ałtū "Town-on-the-point-of-a-hill" (Katkwaltu)	Chilkat
Yêndē'staq!ê	Chilkat
Djiłqō't (Chilkoot)	Chilkat
Dayê' (Dyea)	Chilkat
Cqaguê' (Skagway)	Chilkat
Decu' (Haines mission)	Chilkat
Cīt!ka', "Behind Baranof island (Cī)"	Sitka
ŁA'xq!ᵘxo-ān, "Town-where-one-does-not-sleep-much"	Sitka
Kastaxē'xda-ān	Sitka
L!isti'	Sitka
LanA'xk	Sitka
Qona'	Sitka
Q!eckunuwū', "Blue-jay-fort"	Sitka
Daẋē't, "Fallen-stunned," because a man there once ate so much halibut that he fell down as if stunned	Sitka
L!uẋa'cayik-ān, "Town-straight-opposite-Mount Edgecomb (L!ūẋ)"	Sitka
Yaqᵘdā't (Yakutat)	Yakutat
Łaxayi'k, "Inside of Łā'xa (an island)"	Yakutat

Some of the foregoing names represent probably little more than camps, while others were designations of towns once occupied by people who are now living elsewhere.

Dialectically the Yakutat were set off from all others, and there was also a certain dialectic, as well as social, distinction between the northern and the southern members of the remaining groups. They will be referred to as "northern" and "southern." Each smaller group also had certain minor dialectic peculiarities.

Besides these geographical divisions, which one might almost call "involuntary," the Tlingit were separated socially into two sides or phratries, each strictly exogamic with descent through the mother. One phratry was known as Raven throughout all of the divisions, while the other was usually called Wolf and in the north also Eagle. One small group was outside of both the phratries and its members could marry into either.

Each phratry was subdivided into clans or consanguineal bands, the members of which were more closely related to one another than to other members of the phratry; and each of these bands usually derived its origin from some town or camp it had once occupied. They were, therefore, in a way local groups, but they differed from the geographical groups just referred to in being social divisions instead of comprising the accidental occupants of one locality. Thus every geographical division contained members of both phratries and usually of several clans of each phratry, while on the other hand a clan was often distributed among two or more geographical groups. Finally the clans were subdivided into house groups, the members of which might occupy one or several houses.

As it will not be profitable to more than mention the names of many of the tribal divisions, instead of discussing them at length, the following lists are subjoined. The first gives the geographical groups, the clans, and the phratry to which each of the clans belonged, and the second the house groups under each clan as far as ascertained:

RAVEN	WOLF
TONGAS	
Gānaxa'dî (people of Gā'nax)	Te'qoedî (people of the island Teq°) Daql!awe'dî
SANYA	
Kiksa'dî (people of the island Kiks) Nexa'dî (people of Nēx).	Te'qoedî [Outside of either clan]
HENYA	
Tē'nedî (bark-house people) K!uxine'dî (marten people) Tak°ane'dî (winter people)	Cankuke'dî (people of Cān, or as below) Lqoaye'dî Qaq!ō's hit tān (human-foot-house people)

RAVEN	WOLF
KAKE	
SAqᵘtē'nedî (grass people, so called probably from their numbers)	Tsague'dî (people of Tsa'gua, or seal people)
TAne'dî (people of the creek TAn)	NēsA'dî (salt-water people)
Q!AłtcAne'dî (people of the creek Q!A'łtcAn)	WAs!hī'nedî (people of the river WAs!)
Qā'tcAdî (people of Qātc, a creek on Admiralty island)	CAnkuke'dî (people of a place near Kake, called Caya', or as above)
KUIU	
Kuye'dî (people of Kuiu)	Nāste'dî (people of the Nass)
SUMDUM	
	Slīt!qoe'dî (people of Slī't!qo, a place near Sumdum which may have been named from a variety of whale called slīt!)
STIKINE	
KîksA'dî (people of Kîks)	Nanyaā'yi (people of Nā'nya (?))
Tî hît tān (bark-house people)	S!īknaxA'dî (people of S!ī'nAx)
Qā'tcAdî (people of Qātc; see Kake)	Xoq!e'dî (people of Xōq!)
Kasq!ague'dî (people of a camp called Kāsq!ē'kᵘ)	Kayā'ckidêtān (people of the house with a high foundation, or shelf people)[a]
Tāłqoe'dî (people of Tā'łqo)	Xēł qoan (people of Foam, a place)
TAKU	
Ǫānaxa'dî (people of Ǫā'nax)	Yênyē'dî (mainland people or place of hemlock people)
	Tsat!ēnyē'dî (people of Tsa't!e river)
AUK	
L!enē'dî	Wuckitā'n (people with houses on top of one another)
HUTSNUWU	
Dē'citān (people of end-of-road house)	Wuckitā'n (see above)
Togye'dî (outlet people, so called because they lived at the outlet of a lake—part of above)	DAqL!awe'dî
Ānq!a'kitān or Q!ā'kitān (people of the house in the middle of the valley)	Te'qoedî (people of Teq°)
HUNA	
T!A'q!dentān (retaining-timber-house people)	Wuckitā'n (see above)
TAq! hît tān (people of slug house—part of above)	Tcūkane'dî (bush or grass people)
Kosk!ē'dî (people of Kōsē'x)	Kā'gwantān (burnt-house people, or people of the burnt down house)

[a] Said to have stood in a position to the Nanyaā'yi similar to that of servants.

RAVEN	WOLF
SITKA	
Kiksa'dî (see above)	Kā'gwantān (see above)
Watāne'dî (part of Kiksa'dî)	Kūk hit tān (box-house people—part of above)
L!ūk!naxa'dî (king-salmon people)	Q!aq!ā' hit tān (probably a subdivision of the Kā'gwantān)
Q!at!kaā'yî (island people)	Katagwa'dî
CHILKAT	
Łuqā'xadî (quick people)	Kā'gwantān (see above)
Ǫānaxa'dî (people of Ǫā'nax)	Taqêstina' (people of Taqsī't, the channel inside of Wrangell island)
Nucekaā'yî (people back of the fort)	Daql!awe'dî
YAKUTAT	
Kā'ck!e qoan (people of the creek Kâck!)	Te'qoedî (see above)
Kosk!ē'dî (people of the town Kos!ē'x)	
Ǫānaxa'dî (see above)	
Staxā'dî(?)	

HOUSE GROUPS

All the names in this list except the Sitka names were furnished by Katishan of Wrangell, and it is accurate in proportion to the nearness of the towns to the latter place. Of the Yakutat house groups he knew little. The Sitka list was obtained on the spot.

TONGAS

Ǫānaxa'dî

Yēł hît (raven house)	**Kîdjū'k hît (hawk (?) house)**
X̣ās hît (moose house)	**Nū hît (fort house)**
Q!a'tgun hît (house built on a narrow point)	**S!aX̣ hît (starfish house)**
	Qotî's! hît (looking-out house)

Te'qoedî

Cā'nax hît (valley house)	**Wā'nda hît (wā'nda house, wā'nda being the name of an ornamental cloak worn at dances. It was trimmed with eagle skins along the sides)**
X̣ūts! hît (grizzly-bear house)	
Kāts! hît (Kāts!'s house)[a]	

Daql!awe'dî

Kūn hît (flicker house)	**Kīt hît (killer-whale house)**

SANYA

Kîksa'dî

Wēq! hît (sculpin house)

Te'qoedî

X̣ūts! qowu' hît (grizzly-bear's-den house)	**Kāts! hît (Kāts!'s house)**[a]
	Gūtc ka hît (house on the hill)

[a] See p. 455.

Nēxʌ'dî

Tcāk! hît (eagle house)
Tcāk! qlō'sî hît (eagle's-foot house)
Sîtçē'dî xā'î hît (beaver-house house)

HENYA

Tē'nedî

Yēł hît (raven house)
Yên-wułiçʌ'cî (house drifted ashore)
Tī hît (bark house)

K!uxîne'dî

K!ūx hît (marten house)

Tākᵘane'dî

Yāî hît (whale house)

Cʌ'nkukedî

Çonaqʌdē't hît (çonaqʌdē't house; see p. 460)
Çūts! hît (grizzly-bear house)

Qaq!ō's hît tān

Qaq!ō'sî hît (human-foot house)
Tsîsk! hît (moose house)

Łqoaçe'dî (no house names obtained)

KAKE

Sʌqᵘte'nedî

T!ʌq! hît (retaining-timbers house)

Tʌnē'dî

Kū'cta hît (land-otter house)

Q!ʌłtcʌne'dî (no house names obtained)

Qā'tcʌdî

Qlāk!ⁿ hît (old-salmon house)
Qotî's! hît (looking-out house)

Tsague'dî

Xā-î hît (yellow-cedar house)
Tūs! hît (shark house)

Nēsʌ'dî (no house names obtained)

Wʌslhī'nedî (no house names obtained)

Cʌnkuke'dî (no house names obtained)

KUIU

Kuçe'dî

Xîk hît (puffin house)
Qotxʌ'naxa hît (star house)

Nāste'dî

Tclît hît (murrelet house)
Kūn hît (flicker house)
Dekī'nū hît (fort-far-out house)

SUMDUM

Sîtlqoe'dî

Sît! hît (glacier house)

S!ît! hît (s!ît! house, the s!ît! being a whale like a killer and almost as large)

STIKINE

Kîksa'dî

Ǫagā'n hît (sun house); chief, Qāła'ktc (moving of sides—of a frog)
T!aq! hît (retaining-timbers house); chief, atū' (property)
X̣îx̣tc! hît (frog house)[a]; chief, Qāła'ktc (same man as second above)

Tî hît tān

Tî hît (bark house); chief, Ǫac (a Tsimshian name taken in war)

Qā'tcadî

Nāłx hît (halibut house, nāłx, being the name of the largest variety of halibut) chief, Tāk-sēq! (winter change, because frogs go away when winter comes)
X̣îx̣tc! hît (frog house)[b]; chief, Kēcī'tc (woman turning into a man)
Ałqā' hît (gambling house); chief, laqē'; meaning uncertain
Kaoṭiyā'ỵî hît (house lowered from the sky—like one in a favorite Tlingit story; chief, Kātgatē'x (because Raven had a basket of the kind called kāt)
Teac hît (rush house, in memory of their old houses in the interior); chief, Łtā'ckê (frog's back)

Kāsqlague'dî

X̣ēl hît (thunder house); chief, Sgāxk! (named after the raven, because the raven is always begging for something to eat)
l!ādē'n hît (house standing at right angles to the rest); chief, Tā'naxk!; meaning uncertain
X̣îx̣tc! xā'ỵe hît (frog's-den house); chief, Ān-lēn yēł (big-town raven)
Tān hît (sealion house); chief, Kokustā'î; meaning uncertain

Tāłqoe'dî

Cā hît, or in full, Tāłq° naxk! ᵘ-ca hît (mountain-back-of-Tāłq° house); chief, Qādadū'gu (human skin)
Kaxqoỵê'ndua hît (the name of the last monster that the hero Łq!ayā'k! and his brothers killed was Kaxqoỵê'ndua); chief, Qoxoē'łcattc

Nanỵaā'ỵî

Q!a' tgu hît (shark house); chief, K!oxcu' (the name of the first Nanỵaā'ỵî, chief of Old Wrangell. Cēks, below, was his nephew)
Hît lēn (big house); chief, Cēks (a Tsimshian name taken in war)
Tatū'k hît (cliff house); chief, Guṭa'o (monster)
Q!a'tgu nā'sî hît (shark's-intestines house); chief, Gałge'; meaning uncertain.
Kūk hît (box house); chief, Kīt-lēn (big killer whale)
Ā' ntcūka hît (house at the farther end of the town—its position in Old Wrangell); chief, Kādjhōsgū't; meaning uncertain

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[a] He built this house when he was going to have his children tattooed, and was the first person in Alaska to invite people to a feast on such an occasion, so it is said.

[b] This name was given with a Kîksa'dî woman who settled among these people.

S!ūknaxʌ'dî

Q!ān hît (red house); chief, Cä'xna; meaning uncertain.
Ānkᵘ hît (named from a cane taken from the Tsimshian in war and applied to a house in order to disgrace them); chief, Qōłä'n (taken from a picture of wealth seen by this man and called łʌä'n)

Xōq!e'dî

Ctīn hît (steel house), recently adopted; chief, Gux-nä'wu (dead slave)
Ä'nda ū'na hît (cannon house); chief, ʟagwʌ'tc (a kind of weed like rhubarb, used in making peace "because it looks nice")

Kayä'ckidetān

Kīt hît (killer-whale house); chief, Tēq (stone)

Xēł qoan (no house names obtained)

TAKU

Ǵānʌxʌ'dî

Î'cka hît (salmon-hole house)
Yên-wułīxʌ'cî hît (house drifted ashore—at time of flood)
Yēł hît (raven house)

Yênyē'dî

Tcāʟ hît (halibut house)

Tsat!ene'dî

Xūts! hît (grizzly-bear house)
Yeyuwa' hît; named from a mountain

AUK

L!enē'dî

Yʌ'xtê hît (great-dipper house, referring to the constellation)
Tīʟ! hît (dog-salmon house)

Wucketä'n

Hît ʟēn (big house)

HUTSNUWU

Dē'citān

Yēł hît (raven house)
Dē'cu hît (house at end of road)
Gūn hît (spring house)

Ānq!ä'kitān

Ānq!ä'k hît (house in the middle of the valley)

Wucketä'n

Nū hît (fort house)

Dʌqʟ!awe'dî

Kīt hît (killer-whale house)

Te'qoedî

Xūts! hît (grizzly-bear house)

HUNA

T!A'q!dentān

Qacā'yī hît (man's-head house)
Yēł s!ā'ge hît (raven's-bones house)
Yēł ku'dî hît (raven's-nest house)[a]

TAq! hît tān

TAq! hît (slug house)

Kosk!e'dî

Xās hît (moose house)

Wucketā'n

Wū'cka hît (house over all, or shelter for all)

Tcū'kanedî (no house names obtained)

YAKUTAT

(These are all the names the writer could obtain)

Kosk!e'dî

Xās hît (see above)

Te'qoedî

Xūts! hît (grizzly-bear house)

CHILKAT

Łuqā'xadî

Yēł hît (raven house; others unknown to informant)

Ǫānaxa'dî

Yā'ī hît (whale house)
Yēł hît (raven house)
L!uk!xâ' hît (worm house)
Xixtc! hît (frog house)
Qotî's! hît (looking-out house)
Q!āk hît (canyon or valley house)

Nucékaā'yî (no house names obtained)

Kā'gwantān

Łīgū'cî hît (long-(killer whale's-) dorsal fin house)
Kīt hît (killer-whale house)
Kāts! hît (Kāts!'s house)
Ǫōtc hît (wolf house)
Gao hît (drum house)
Xūts! hît (grizzly-bear house)
Tcāk! s!ā'ge hît (eagle's-bones house)
Tcāk! ku'dî hît (eagle's-nest house)
(The two names last mentioned are said by Wrangell people to have been claimed only in very recent times, the eagle not properly belonging to them)

DAqL!awe'dî

Kīt gū'cî hît (killer-whale's-dorsal-fin house)
Kīt hît (killer-whale house)

Taqêstîna'

L!a'oca hît (sandy-bluff house)
Gūn hît (spring house)

[a] Given by an old woman of the T!A'q!dentān.

SITKA

The names in this list are supposed to be given in the order in which the houses stood, beginning at the southern end of the town.

Tî'na hît (copper-plate house); a gonaqADē't came up before the builder of this house in the form of a copper and told him to erect it
Chief, Niχā' na, a Russian name, or Qōxk!â'n; meaning uncertain
Clan, KîksA' dî

ĢAgā'n hît (sun house)
Chief, Yadustē'q! (wild goose)
Clan, KîksA' dî

Ctīn hît (steel house); so named because in a fight with the Russians the chief captured a piece of steel and placed it in front of his house
Chief, Nāwuckē'L (wounded wild goose flapping around)
Clan, KîksA'dî

QāxA'tdja hît (lively-herring house); referring to a herring jumping about
Chief, Yēłdjī'n; probably from a frog
Clan, KîksA'dî

Itc hît (rock house)
Chief, Tca'yadēgāx (raven crying everywhere)
Clan, a low class of Kā'gwAntān

S!a hît (clay house)
Chief, Łsa'guha (notable voice), referring to the cry of the goose
Clan, KîksA'dî

XāL hît (iceberg house)
Chief, Qanē'x (saved or captured man)
Clan, TcukAne'dî

Łū'koa hît (house on a point), because it was on the point where "Baranoff's castle" afterwards stood
Chief, Tuksaiê'x (copper-green color of frog)
Clan, KîksA'dî

QotxA'naxa hît (star house)
Chief, Yakwâ'n (swimming wolf); this man led in the last great fight with the Stikine Indians
Clan, Kā'gwAntān

Adūwaxî'tcî hît (house that carries a big load, and is bent over with its weight)
Chief, Ts!ągê' (boneless frog, because the frog has few bones)
Clan, KîksA'dî

Tcāk! ku'dî hît (eagle's-nest house)
Chief, L!êx (gray wolf)
Clan, Kā'gwAntān

TcāL hît (halibut house)
Chief, Dātχiagu'tc (wolf walking around a person)
Clan, Kā'gwAntān

Hīn ka hît (house on the water); said to have stood on piles over water. It was still standing when the writer's informant was a small boy
Chief, Kāk!ⁿnū'k!ⁿ, refers to a wolf
Clan, Kā'gwAntān

Dēx-q!aowu'łk (house with two doors)
Chief, Qā'djêxdaqē'na (eagle going around a dead thing and making a noise)
Clan, Kā'gwAntān

Nū hît (fort house)
Chief, Dā'tłkêts!ā'tê (stomach of a wolf)
Clan, Wucketā'n

Xūts! hît (grizzly-bear house)
Chief, Ya'naxnawu (swimming wolf)
Clan, Kā'gwantān
Ga'yēs! hît (iron house); the first nails seen, found in a spar or plank drifted ashore, were driven into this house.
Chief, Hā'yeāk!ᵘ (hollow left in shallow water by a shark swimming rapidly)
Clan, Kā'gwantān
L!ūk! hît (king-salmon house)
Chief, L!ūk! (king salmon)
Clan, Q!at!kaā'yî
Yā'cka hît (shelf house)
Chief, Goqʟ! (swan)
Clan, Q!at!kaā'yî
Gōtc hît (wolf house)
Chief, Anaxū'ts! (the grizzly bear)
Clan, Kā'gwantān
Tcāk! hît (eagle house)
Chief, Łē'ni (łēn=low tide, and name probably means, expressed in full, "Eagle-walking-on-beach-at-low-tide")
Clan, Kā'gwantān
Ānyê'dî hît (high-caste house)
Chief, Stū'waqa; named from a wolf
Clan, Kā'gwantān
Yā'î hît (whale house)
Chief, Q!ēxī'x; meaning uncertain
Clan, L!ūk!naxa'dî
Kāwagā'nî hît (burnt-down house)
Chief, Āndecî' (many wolves howling about the town)
Clan, Kā'gwantān
Xî'na hît (house at the lower end of the town); so named because it stood at the lower end of the town on Alsek river from which its occupants came
Chief, Stagwâ'n; meaning uncertain
Clan, L!ūk!naxa'dî
Ta hît (sleeping house)
Chief, Cadasî'ktc (a king salmon that always stays in the mountain streams and never comes down to the sea)
Clan, L!ūk!naxa'dî
Xî'na hît (house at the lower end of the town)
Chief, Qāłqā'wa (celebrated man; brother of the chief who erected the second house above)
Clan, L!ūk!naxa'dî
Tcāk! ku'dî hît (eagle's-nest house)
Chief, Q!āłē'q!ᵒ (red-mouthed wolf)
Clan, Kā'gwantān
Ānē'gayak hît (house below the rest of the houses)
Chief, Qāłgā's! (precious parts of an eagle)
Clan, Kā'gwantān
Tūs! hît (shark house)
Chief, Sā'xa (named from a wolf's cry)
Clan, Kūk hit tān, a branch of the Kā'gwantān
Kūk hit (box house)
Chief, Qā'djkatan (man standing on a mat)
Clan, Kūk hit tān

Qotî's! hît (house looking out on the sea)
Chief, Ẏä'ndjiyîtgûx (hungry wolf crying for food)
Clan, Kûk hît tân
Łlādē'n hît (house standing sideways); it was the highest ranking house of the Box-House people
Chief, Qotcē'n (named from a bear)
Clan, Kûk hît tân
Xās! hît (cowhide house; probably moose house originally); once when they potlatched and were without a roof, they covered their house with cowhide
Chief, Yēłnawu' (dead raven)
Clan, Kosk!ē'dî (subdivision, Xās! hît tân)
Cgādā'yî hît (named from a creek called Cgādā'yî, where the first house of this name stood. It was near a waterfall, referred to in the stories, just south of Yakutat
Chief, Q!aī'tk!î (Raven has eaten of it, referring to food left over by Raven)
Clan, Kosk!ē'dî
Kū hA'ta hît (house of the stick, or frame, with which salmon used to be chased downstream)
Chief, Łtāyî' (color of an alder tree about his nose)
Clan, Kā'gwAntān

HISTORICAL DEVELOPMENT

The Tlingit quite uniformly trace the origin of nearly all their clans to the Tsimshian coast "below Port Simpson;" that is, to the neighborhood of the mouth of Skeena river. It is said by some that nearly all of the present clans immigrated in this manner, and that most of the "old Alaskans," those whom they found in possession, have died out. Katishan, chief of the Kāsq!ague'dî at Wrangell, mentioned some of these by name, but a thorough investigation would probably develop quite different stories regarding them, especially as many are very small and are more likely to have been subdivisions than surviving groups. The only point that may have significance is the fact that nearly all so enumerated were of the Raven clan. There are several other bits of evidence which seem to show that the distinction between the two phratries was of more importance historically than would at first appear. Thus, according to a Sitka interpreter, the Eagle people were called Na (nation) or Cêngoqedî'na,[a] but there was no one name for all the Ravens, they being one simply in marriage laws, emblems, and in some other respects. According to Katishan all of the Wolf clans used to be denominated S!ī'tqoedî[b] and all of the Raven clans GonAtqAnā'yî, the latter of which expressions seems to be identical with the word applied by an individual to those of the opposite phratry.[c] This suggests the question whether distinction of phratry could have been associated originally with a racial difference, and such a possi-

[a] This is evidently taken from the name of a clan which the writer has elsewhere called CAnkuke'dî. The reason for applying this name to the entire phratry is not apparent. Possibly the interpreter was mistaken.

[b] Not to be confounded with the S!it!qoe'dî of Sumdum (p. 399).

[c] Katishan declared that "there are more Ravens in Alaska than Wolves."

bility again presents itself when we come to consider the origins of the separate clan divisions. Although the list just given contains names of about twenty-five clans belonging to each phratry besides one which falls outside of both, many are nothing more than subdivisions, and only fourteen are found to stand out at all prominently. On the Raven side these are the Ǫānaxa'dî, Kîksa'dî, Qā'tcadî, Kāsq!ague'dî, L!enē'dî, Kōsklē'dî, L!ūk!naxa'dî, Łuqā'xadî, and Kâ'ck!e qoan; on the Wolf side the Te'qoedî, Daql!awe'dî, Nanyaā'yî, Tcūkane'dî, and Kā'gwantān. The Tcukane'dî were considered low caste, but appear from the stories to have formed a rather ancient group.

It is interesting to find that all the clans of the southernmost towns, Tongas and Sanya, always excepting the Nēxa'dî, belong to this list, they being the Ǫānaxa'dî (or Ǫānaxte'dî), Te'qoedî, Daql!awe'dî, and Kîksa'dî. Traditions regarding the origin of the two clans first mentioned point unanimously to Prince of Wales island and Kuiu, and, if we are to trust them still further, the Ǫānaxa'dî were the first people to settle at Tongas, whither they had come from Ta'qdjîk-ān on the northwest coast of Prince of Wales island, then the principal Henya village. According to another story the Tongas people came to Kuiu from the south, and afterwards started back to the present site of Tongas, which they had previously noticed. During this last migration they camped for a time on an island called Tangā'c, and later gave its name to their village. This tradition probably refers to the Ǫānaxa'dî, for the Kuiu and Henya people are very closely related. The Ǫānaxa'dî themselves derived their name from another island, Ǫā'nax. The family history of these people is certainly closely associated with the town of Ta'qdjîk-ān for it was there that a Ǫānaxa'dî woman nursed a woodworm, thus giving her people the woodworm emblem, and, as above noted, the Tak"ane'dî (Winter people) are the Klawak branch of that clan. Another body of Ǫānaxa'dî moved to Chilkat, where they are also of high rank, and still others are among the Taku and at Yakutat.

The Te'qoedî received their name from an island called Teq', said to lie near the northern end of Prince of Wales island, and thus near the traditional home of the Ǫānaxa'dî. According to Haida accounts they were their chief opponents at the time when that tribe invaded Alaska and they subsequently fled to the mainland. That the territory in Alaska now occupied by the Kaigani Haida was formerly Tlingit is a well known fact, and is attested by all of the names of their towns. Thus Sukkwan is from Tlingit suqq'-ān ("grassy town"), and Kasaan or Ká s!-ān is said to mean "pretty town," because when the people came there they said, "This is the only spot that looks good." At Klinkwan the writer was told that the name of that town in Tlingit signifies "shell-fish village" or perhaps rather "town-where-people-get-things-at-low-tide." Katisban, however, affirmed that it

was named from the yellow cedar bark soaked and spun into long strings and called łān, for which the place was noted. Thus the Tlingit word would be łā'nqo-ān. There is also a difference of opinion about Howkan, since the Haida living in that neighborhood, who pronounce the name 'aokłia'n, affirm that it refers to a stone which used to stand in front of the place, while Katishan derives it from qō'wakan, "deer," the animal being very plentiful in that neighborhood. The first explanation is probably correct. It is uncertain whether Howkan and Kasaan were occupied as towns before the advent of the Haida, but tradition affirms it of Sukkwan and Klinkwan, the former of which was destroyed by the invaders. The people of Kasaan, however, according to Doctor Newcombe, claim to have acquired their town by regular purchase.

From all the accounts obtained it would seem that the Te'qoedî constituted a large part of the population of Prince of Wales island and moved to Tongas and Sanya at the time when the Haida immigration took place, whether that happened peaceably or otherwise. Part of them are now among the Hutsnuwu people and part at Yakutat.

The last group in this region, the NēxA'dî of Sanya, is peculiar as standing outside of the two great phratries. It is characterized principally by the possession of the Eagle crest and Eagle personal names, and possibly it is from this clan that the northern Tlingit have also obtained them. Their name means simply People of Nēx, a creek in their country. Along with many other clans, they are supposed to have come from "below Port Simpson," but on the other hand it is possible that their origin is connected with an Athapascan tribe, which formerly occupied the shores of Behm canal just northward and intermarried with the Tlingit to a considerable extent in ancient times. The remnants of these Athapascans are now living at Kincolith among the Nass Indians.

The presence of a KîksA'dî house group at Sanya has been noted, and although composed perhaps of comparatively new settlers at that place, it is said that the family had received its name, People of Kîks, from an island in the vicinity. At any rate it was certainly one of the great clans that moved up from the south, and besides having a Sanya branch forms the foremost Raven groups at Wrangell and Sitka. They were the first to settle in the latter place.[a] Their antiquity is perhaps indicated by the fact that two of the principal mythologic heroes of the Tlingit bear KîksA'dî names.

It is said that the wives of some KîksA'dî people once quarreled, and all of one side moved out into a house made of bark, from which circumstance they came to be called Bark-house people (Tī hît tān).

[a] Before coming to Sitka proper they lived in the town of Kastaxĕ'xda-ān, situated in the neighborhood. According to Katishan, the first families to settle in Sitka were the KîksA'dî, KatagwA'dî, and Ǫēs hît tān (Iron house people), the last a part of the Kā'gwantān.

At Wrangell the Bark-house people are credited with but one house group, but the Tē'nedi of Klawak constitute part of the same clan, their name being merely a variation of Tī hît tān.

The DAqL!awe'dî, the significance of whose name was not learned, are another widely scattered group, being found under that name in Tongas, Hutsnuwu, and Chilkat, while the Tsague'dî of Kake are a branch.

Formerly the Henya of the west coast of Prince of Wales island lived at Tuxican (TA'qdjîk-ān), but later their chief moved to Klawak (ŁAwā'k), where he owned a salmon creek, and all of his people followed. Sometimes they camped at Shakan (CAxā'n) to collect fish eggs, and in modern times many Indians settled there near a large sawmill built by the whites. Some of the Henya families have already been mentioned. The Łqoaye'dî and Qaq!ō's hît tān were both parts of the CAnkuke'dî, but it was not learned whether that family was itself connected with any other. They are also found at Kake, and Krause enumerates them among the clans of the Chilkat town of Klukwan. According to Katishan they took their name from an island called Cān, but according to an old Kake man, from a place near Kake called Caya'.

The Kuiu consisted of but two clans. About the Kuye'dî nothing of consequence was learned, but the Nāste'dî are often spoken of as if they were one people with the Nanyaā'yî and Kā'gwAntān. As frequently happens, however, it is difficult to say whether this means unity of origin or nothing more than membership in the same phratry. It may be of some significance that they share the Flicker house (Kūn hît) with the DAqL!awe'dî. Their name and origin are said to have been derived from the Nass.

While the people of Kuiu, Henya, Sanya, Tongas, and part of the Kakes are said to be very closely related to one another, the origin of some of the Kake clans differs in being intimately connected with the interior of the continent. In the time of the flood, according to one story, there were glaciers extending entirely across the Stikine river, so that canoes could not pass. The Kake Indians, who were then living in the interior, wished to come down, and finally accomplished the feat by passing directly under the glacier. Instead of settling on the river, however, where they could have lived in the midst of plenty, they went out to Kupreanof island, whence in later times they moved back to Wrangell. On close examination this story is found to apply particularly to the Qā'tcAdî, who still have the house name Rush house (TcAc hît) in memory of their houses in the interior, but the SAq"tē'nedî, and probably the remaining Raven clans at Kake, are considered divisions of this. According to one of the Kake men, however, the Qā'tcAdî were always Tlingit, being descended from a Tlingit woman who was captured by the Athapascans when out picking berries. This was when they first learned that there were Indians up the

river. It is possible that the second account is the truer one, but on the other hand it may have been made up to conceal their extraneous origin, "Stick Indians" as the Athapascans are called, having been very much looked down upon in olden times. Their name is said to be derived from a creek on Admiralty island called Qātc

The NēsA'dî (Salt-water people) also are said to have come down the Stikine from among the Athapascans. Their name is explained by the story that they were carried up that river at the time of the flood and chased down again by the interior tribes.

"A man coming from a certain creek was so lousy that he died, and ever since his people have been called Lousy-creek people (Was!hī'nedî)."

Most important of all the southern groups of Tlingit were the Stikine. They claim that they formerly owned, besides the Stikine valley, parts of Kupreanof and Prince of Wales islands and the coast southward as far as Loring. The last-named district, however, appears anciently to have been the special property of the Foam people (Xēł qoan), who have moved to Wrangell only in recent years. The Stikine also had exclusive rights of trade with the interior Indians, who were valued for what could be gotten out of them but otherwise looked down upon as a lower race. Formerly the principal Stikine town was QāłtcAL!-ān, now called Old Wrangell, some distance south of the present town of Wrangell, and it is claimed that the first carved poles in Alaska were there set up. The Indian town at modern Wrangell was built around a little bay near the northern end of Wrangell island and on several small islets in the bay. From the inclosed appearance of this bay and the outline of the mountain behind it the town was called QatcxA'na-āk!ᵘ (Human-hip lake).

All of the Wolf families in this place, except the Foam people above referred to, appear to belong to one group, and among them the most important, as well of Wrangell as of this phratry, were the Nāṇyaā'yî. Although all these clans are said formerly to have come from the Tsimshian coast,[a] the more immediate migration was southward from Taku. During this migration part stopped at a place called Sī'nAX and were afterwards known as S!īknaxA'dî. The Xōq!e'dî receive their name from a place a short distance south of Old Wrangell called Xōq!, and the Foam people were thought to be related to them, but this may mean nothing more than association together in the feasts. According to one informant the Kāyā'ckidetān were part of the Xōq!e'dî; according to others, of the Nanyaā'yî.

The Raven clans at Wrangell have already been spoken of, except the Kāṣq!ague'dî and Tāłqoe'dî, which are said to have had a similar origin. According to their present chief, the former were originally Haida from the StA'stas clan of Masset. More immediately they are

[a] Lieut. G. T. Emmons informs the writer, however, that the Nanyaā'yî were an inland people and did not come up from the south.

said to have come from the Wut-cA'nîna, a clan at Kasaan, which is perhaps identical with the Yā'dAS, a StA'stas branch living at that place. It is not a little curious that a Raven group among the Tlingit should have come from an Eagle group among the Haida. On their way to Wrangell these people stopped for a long time at a place called Kāsq!ē'k", from which they received their present name.

The Slīt!qoe'dî are said to be "old Alaskans" and intermarry much with the Taku people to the north.

The Yênye'dî of Taku had close relations with the Nanyaā'yî, and the latter, who are said to have come from the same place, may formerly have constituted one clan with them. The Tsat!enye'dî are named from a creek on Admiralty island. The old Taku village was at the head of Taku harbor, but later the Taku formed another on the north side of the entrance to Taku inlet, and in recent years have resorted a great deal to Juneau.

At Auk (Tlingit, Āk!", little lake) the principal clan was the L!enē'dî, to whom the story of the L!ê'nAXxī'dAq (property woman) is always traced. Some of the Wucketā'n also lived with them, although their place of origin seems to have been Hutsnuwu or Huna. An old man at Sitka seemed to think that the Wucketā'n had come from KAq!Anuwū' along with the Kā'gwAntān and other Eagle clans, but the fact that they possess the same principal crest as the DAqL!awe'dî, the killer whale, suggests an affinity with that clan. The old Auk village Ā'ntcgAłtsu (abandoned town) was situated at Point Louisa, north of Douglas island, and the modern town of Juneau is in their territory.

Anciently the Hutsnuwu (Xuts!nuwū', grizzly-bear fort) people or Xu'ts!îda qoan (which means the same thing) occupied two different towns on the west coast of Admiralty island. The more southern, called NAłtū'ck-ān, was in White Water bay, and the northern, Āngū'n, on the coast above modern Killisnoo where the whites had established canneries and whither the inhabitants of both of these towns have now removed. The two Raven groups living here, the Dē'citān and Ānq!a'kîtān, are said to have separated at some former time on account of internal disturbances. Their names, which are simply derived from those of houses, lead one to suspect that further investigation would show them to be parts of some other Raven group. According to Krause, the Ānq!a'ketān and Te'qoedî lived at NAłtū'ck-ān and the Dē'citān, Wuckitā'n and DAqL!awe'dî at Āngū'n. Part of the Hutsnuwu people were called Asā'nk!îqoan, but these appear to have formed a local rather than a clan group.

With two possible exceptions the remaining Tlingit clans to be considered fall into two groups, associated historically with certain distinct regions. One of these is Wolf, and comprises the Kā'gwAntān, of which the Kūk hît tān is a part, the KAtagwA'dî and the TcukAne'dî; the other the Łuqā'xAdî, Nucêkaā'yî, L!ūk!naxA'dî, Q!Atkaā'yî, and

Kosklē'dî. Tradition localizes the first of these very strongly about Icy strait, especially upon the peninsula between Lynn canal and Glacier bay, and the second at the mouth of Alsek river (Ałsē'x hīn).

The origins of the first are bound up with the history of a man called Kakē'q!ᵘte, who is the hero of two stories, recorded by the writer, one of which gives the story of the Kā'gwAntān and several other clans.

After a fight with live coals as weapons, which resulted in giving them their name, the Kā'gwAntān scattered, some going to Huna, some to Chilkat, and some to Sitka where they joined the KîksA'dî. It is evident that the KAtagwA'dî, to which Kakē'q!ᵘte belonged, and the TcūkAne'dî were both considered as related to the Kā'gwAntān. The TcūkAne'dî were named from a creek, Tcū'kAn hīn, on which they were encamped at the time of Kakē'q!ᵘte's return from the interior with Athapascans, as detailed in the myth, and they are now considered rather low caste.

Of the families constituting the second group just referred to, the Łuqā'xAdî[a] are now at Chilkat, but the story just given localizes them in earlier times at the mouth of the Alsek. The Nucekaā'yî are said to be part of these. The Q!At!kaā'yî (island people) received their name from an island at the mouth of Alsek river said to be called ĢAłtsē'nîwâ, and were a part of the L!ūk!naxA'dî of the same region. According to one informant, it was to this latter clan that Kakē'q!ᵘte belonged. It is also said, and with probability, that the Kosklē'dî belonged to this clan, though others state that they came from the coast farther west from the StAxa'dî of Copper river, who appear to have been Athapascans.

The origin of the Kâ'ck!e qoan is given in a long story which the writer obtained from a member of that clan. From this it appears that they were originally interior Indians who came down to the coast after some internal disturbance and purchased a creek near Yakutat called Kâck!, from which they received their name. The Kâ'ck!e qoan are also said to be called StAxa'dî, because they have dances similar to those of the true StAxa'dî.

According to one informant, the Taqêstina' of Chilkat were part of the same clan as the Nāste'dî. Katishan informed the writer that in the general migration northward they were lost in the channel east of Wrangell island, which is called TAqsī't, and afterwards received their name from it.

There were four principal Chilkat towns, three of which—Klukwan, Katkwaltu, and Yendestake—were on Chilkat river and inlet, while the fourth, Chilkoot, was near the head of Chilkoot inlet. Many of these Indians have now moved to the white settlements and to Haines mission. According to Krause, Chilkoot was occupied by

[a] Krause has unwittingly constituted a new clan by listing the "Kādūwot-kēdi," evidently an equivalent for Łuqā'xAdî, since the words mean the same thing.

the Ġānaxte'dî; Klukwan by the Ġānaxte'dî, Kā'gwantān, Taqêstina', and Daqł!awe'dî; Katkwaltu by the Nucekaā'yî; and Yendestake by the Łuqā'xadî.

From this fragmentary account it would appear that the Ġānaxa'dî or Ġānaxte'dî and Kîksa'dî, and perhaps the Qā'tcadî, ł!uk!naxa'dî, and Łuqā'xadî were clans of something like national significance on the Raven side and the Te'qoedî, Daqł!awe'dî, Nanyaā'yî, Kā'gwantān, and perhaps Nāste'dî on the Wolf side. Native legend carries most of these back to the Tsimshian coast, but it must be remembered that new bodies of people might be taken into a clan at any time by simple absorption without having any distinguishing marks attach to them.

The aboriginal neighbors of the Tlingit were, in the interior beyond the mountains, various Athapascan tribes, to the southeast the Tsimshian and Haida, and on the extreme northwest the Eskimo.

With the Athapascans, whom they called Ġo'nana (strange or different nation), a lively trade was carried on along natural lines of intercommunication marked out by the Stikine, Taku, Chilkat, Alsek, and Copper rivers. This trade was one of their greatest sources of wealth, and is said to have lain at the basis of the power obtained by the Nanyaā'yî and Kā'gwantān. The Tsimshian, called by the Tlingit Ts!utsxa'n, they esteemed as people of high culture from whom new ideas and new customs reached them, and seem to have thought much more of them than of the Haida, although recognizing the superiority of the latter in certain respects. Their own term for the Haida is Dekī'na, "Nation-far-out [at sea]," and for the Queen Charlotte islands, Dekī'qoan ā'nî, "Town-of-the-people-far-out." After the Haida reached Alaska the relations between them and the Tlingit became very intimate, and there was a great deal of intermarrying, facilitated no doubt by a very similar social organization. They have had more to do with the Tsimshian since New Metlakatla was founded by Duncan on Annette island. The Tlingit claim not to have known anciently of the far southern people such as the Haida until they found a canoe, containing bodies of strange people, which had drifted ashore, but latterly, at any rate, they waged war continually on the people of Nass and Skeena and on the Haida.

To Tlingit aggressions on the Eskimo allusion has already been made. It seems probable that the Tlingit were slowly pushing westward when the Russians appeared, and would ultimately have reached the Aleutian chain or the Yukon delta.

Russians are known to the Tlingit as Ānū'ci, while other white people are called Ļēt qoan (white or snow people) or Gū'tsk!î qoan (people from the place where the clouds reach down to the earth—i. e., horizon people). The English they call Gî'ndjîtewân, a corruption of the "King George man" of the Chinook jargon.

CLAN EMBLEMS

As with other Northwest Coast peoples, the different Tlingit clans usually laid claim to certain distinctive carvings and names; but, unlike the Haida clans, each of which used a number of crests of this kind, the Tlingit divisions had comparatively few, and generally held but one or two in particular esteem. In the case of carvings these crests were commonly held in special consideration only when they occurred in some definite form, such as a wooden hat, house post, or baton. An emblem is said to have been put on the war helmet, so that its owner might die with it. Theoretically, the emblems used on the Raven side were different from those on the Wolf or the Eagle side, and, although a man of high caste might borrow an emblem from his brother-in-law temporarily, he was not permitted to retain it. Some families were too poor to have an emblem, and on the other hand it is said of some of the great ones, like the Nanyaā'yî, that they were so rich that they could use anything.

The wolf is used by most Wolf clans, but was especially valued by the Kā'gwAntān, and also apparently by the Yênye'dî of Taku. The Xoq!e'dî, who anciently had no crest, began to use the wolf in recent times, but met opposition on the part of the Kā'gwAntān and desisted. Most families wore this as a hat; the DAqL!awe'dî had it designed upon a dance blanket. The tc!īt (murrelet—Emmons), a small bird that makes a whistling sound, was used by many Wolf clans, especially the DAqL!awe'dî and the Kā'gwAntān.

The Eagle was a special possession of the NēxA'dî of Sanya, who were outside of both phratries; but it is now employed by the northern Wolves, who from this crest were called also Eagles. Katishan thought that it might have been adopted by them after some trouble with the NēxA'dî, but it is by no means certain that this is the case, especially since the corresponding Haida phratry is likewise called Eagle, and many Haida seem to have married in Sitka. The eagle hat is now worn by the Kā'gwAntān of Sitka and Chilkat. The NēxA'dî claim to it is based on the belief that one of their people was formerly assisted by an eagle, and finally turned into one. The eagle hat is claimed by some of the DAqL!awe'dî, also.

The grizzly-bear hat was used by the Te'qoedî, who claimed that a member of their clan had married a female grizzly bear, while the Kā'gwAntān, who claimed the same thing, had bears' ears fastened to the sides of their heads and called them Kāts! after the name of the man through whom the right had been obtained. The Kā'gwAntān of Chilkat have a shirt made out of grizzly-bear hide, which they wear in memory of this event.

At the time of the flood a grizzly bear and a mountain goat climbed a mountain in company with the fleeing Nanyaā'yî, and ever since that

clan has used a grizzly-bear skin and the head of a mountain goat, the former of which they regard as their very highest crest. The first grizzly-bear skin that they used is, of course, said to have been that of the identical bear which had accompanied them, but this in time became worn out and had to be replaced.

The killer whale is claimed especially by the DAQL!awe'dî, Tsague'dî, and Wucketā'n. The first killers are said to have been made out of yellow cedar by a man of the Tsague'dî or DAQL!awe'dî (which are really parts of the same clan), and they claim it from that circumstance. Yet it is used by other Wolf clans, such as the Kā'gwANtān and KAtagwA'ā, and Kīt anyê'dî s!āx" (killer-whale high-caste hat) is the special emblem of Łontī'tc, speaker for the Sitka Kā'gwANtān.

The Slīt!qoe'dî claim a whale called s!īt!, which is like the killer whale.

The Tcūkane'dî claim the porpoise.

According to Katishan the seal was an emblem of the Tsague'dî, but this was denied by a man of that clan.

The shark hat (tūs! s!āx") was used by the Nanyaā'yî and Kā'gwANtān, the latter accompanying it with the devilfish face painting.

The Petrel (ĢANū'k) from whom the culture hero Raven obtained fresh water appears on both sides. According to Katishan it was owned by the Wolves; but an old Sitka woman said the petrel hat (tc!īt s!āx") belonged to the Ravens of Chilkat.

The Dē'citān have the beaver hat.

All Raven clans are supposed to have a right to the Raven emblem; but according to Katishan the ĢānAxte'dî claim it in a special manner, because in the Raven story Raven declared that he himself was a ĢānAxte'dî. The DAQL!awe'dî of the Wolf phratry also think they have some right to it because Raven dragged a house full of fishes ashore at their village. The Łuqā'xadî of Chilkat make so much of this crest as often to be called "Real Ravens," while the Tī hît tān have a special raven emblem which they captured from the Tsimshian in war and call the "Winter Raven." The Kāsq!ague'dî had a hair ornament called yēł tcīn, like the beak of a raven, which hung down on the back of a dancer at the potlatch.

The frog was a special possession of the KîksA'dî, who claimed it from the fact that persons of their clan had had special dealings with frogs, although the stories told about them at Sitka and Wrangell differ. The ĢānAxA'dî of Tongas tell the same story as the Wrangell KîksA'dî about the marriage of a woman of their clan to a frog, and probably claim the frog also. In recent years the Qā'tcAdî at Wrangell and the L!ūk!naxA'dî at Sitka have tried to adopt the frog, but in the latter case their attempt to put up the frog carving precipitated a riot.

The woodworm is a special possession of the ĢānAxA'dî, since one of their women suckled the monster woodworm at TA'qdjîk-ān; and

the Ǫānaxte'dî of Chilkat use a mask of the woman herself. According to another story the Thunders were originally men belonging to the Taqêstina', and therefore that clan claims the thunder emblem.

The common whale hat (yā'i s!āx̣ᵘ) was used by the T!a'q!dentān, K!uxîne'dî, and other Raven groups, its origin according to Katishan having been in the whale killed by Raven.

The king-salmon hat is worn by the L!ūk!naxa'dî and Q!a't!kaāyî.

The swan is also used by the L!ūk!naxa'dî and the goose is used by the Kîksa'dî.

The mouse hat (Kuts!ī'n s!āx̣ᵘ) belonged to the Kosk!ē'dî.

The Tane'dî claim the land otter because the shaman S!āwa'n, who, according to the Raven story, visited a land-otter town and obtained supernatural powers from it, was one of their people.

Fig. 103. Crest hat representing shark.

Among other possessions of like nature are the following:

The Kāsq!ague'dî had the green paint hat (nēxî'ntê s!āx̣ᵘ), which was made with two tops side by side, the Nās-ca'kî-yēł pole (see p. 434) which they first carved, and an eagle cane obtained from Edensaw's people at Masset, Queen Charlotte islands. The Kîksa'dî use the cry of the sea lion, which they once heard at Cape Ommaney when the sea lions were fighting with the killer whales. In former times when they rushed to battle they hooted like the owl, evidently claiming this cry on account of the Kîksa'dî woman who turned into an owl.

The S!īknaxa'dî have a cane called ānkᵘ carved like a man, which they captured in a war with the Tsimshian.

The Tāłqoe'dî claim Mountain-back-of-Tāłqᵒ (Tāłqᵒ-naxk!ᵘ-ca), and Kaxkoyê'ndua, a being that Łq!ayā'k!, one of the principal heroes of Tlingit mythology, turned into stone in Tāłqᵒ bay. A house is named after the latter (see p. 402).

The Naste'dî make use of the big rock outside of Kuiu called Fort-far-out (Dekī'-nū), where Petrel, from whom Raven stole the fresh

water, had his spring. All kinds of birds nest upon it, and when the Naste'dî dance they imitate them.

The Ǫānaxte'dî as well as the Tākᵘane'dî claim the hero Black-skin (Dukt!ū'L!) and represent him on posts with sea-lion intestines wrapped around his head. The Ǫānaxte'dî of Chilkat claim a very large basket called Mother-basket.

The L!ūk!naxa'dî and Q!at!kaā'ẓî claim house posts carved to resemble the Sleep Spirit (Ta) seen by Kakē'q!ᵘtê.

FIG. 104. Crest hat representing killer whale.

The L!enē'dî claim the Great Dipper (Yaxtê').

The T!a'q!dentān also had as emblems a mountain at Cape Fairweather called Tsałxā'n, which was represented on a hat, and a rock, Ta'naku, which was employed in various ways. The origin of the former is referred to the story of Kakē'q!ᵘtê. An island near Cape Spencer called Ǫānaxa' is used in the same way.

Besides being represented on hats, posts, blankets, and elsewhere, these various clan emblems were indicated by face paintings; plates

XLVIII–LVI are reproductions of some of these from crayon drawings, including also representations of several objects not referred to above. The originals of those in plates XLVIII–LV were made for the writer by an old woman of the T!A'q!dentān at Sitka, and those in plate LVI by Mrs Wigg, his interpreter at Wrangell.[a]

Following are illustrations of a few objects used as emblems or in a similar manner:

Figures 103, 104, and 105 and plate LVIII, *a*, are emblem hats. The first of these represents the shark and the second the killer whale, both having been the property of old Shakes, former chief of the Nanyaā'yî. The third is a grizzly-bear hat owned by one of the Qā'tcAdî named "Jim

FIG. 105. Crest hat representing grizzly bear.

Coonie." The writer was unable to hear the story of this from its former owner himself, but it is said that his grandfather had obtained the exclusive right to use it by having killed a grizzly bear with his ax after it had destroyed many people. The gash made by his ax is represented on the top of the animal's head. The bear is not ordinarily found in this man's clan, so we must either suppose that it was a personal crest or assume that it had belonged to his mother's father, and thus to some other clan. Plate LVIII, *a*, which is painted in blue, red, and black and set with abalone shell, also represents the

[a] These are reproduced exactly from the originals, including the artist's attempt at emblem hats and ear pendants as well as additional touches to the pupils of the eyes.

killer whale, and was made for one of the DAqL!awe'dî named Guctehīn, but was not used many times.

At Wrangell there is preserved a headdress ornamented with abalone shell and weasel skins, which is said to represent the storm cloud (gēt), and a portion of a house front, which belonged to old chief Shakes, mentioned above, and is carved and painted to represent the grizzly bear, here called by a special name, Ck!udatcl!'t (many faces).

The drum shown in plate LVII, *b*, was owned by the same chief and has a killer whale painted upon it. Its owner also has a box used in secret society performances, painted with the killer whale on one side and the moon on the other.

Figure 106 shows one of a pair of room partitions, two beavers being painted on each in memory of a supernatural beaver at Killisnoo from which the Dē'citān obtained their crest.

FIG. 106. Room partition bearing design of beavers.

Figure 107 represents a model of the Wolf post of the Kā'gwAntān, which supports the rafters inside. Three wolves and the head of a fourth are represented placed one over the other.

A paddle-shaped dance baton obtained from Katliàn, chief of the KîksA'dî, has a sea gull on one side and on the opposite side a crab painted in red, but it is not certain that these were ever used as crests. About the edges are blue lobes said to represent "animal teeth."

Plate LVII, *a*, is a basketry design representing TsAłxā'n. The ten-sided figure in red is the flank of the mountain which is supposed to look red at a distance, the diagonal black bars on either side above are the slopes, the two small white spots sunshine on the sides, and the long white horizontal bars clouds.

NAMES

The house names (see list, p. 400–407) used by each phratry were generally distinct, and even the separate clans often had names of this sort not employed by others, but a man sometimes claimed the right to a house name owned by the clan of his paternal grandfather, and in this way names readily got out of the clan, though not as readily out of the phratry. Thus the Kayā'ckidêtān are said to have claimed the Killer-whale house name because a grandfather of one of their people belonged to the DAqL!awe'dî. In the same way the Qā'tcADî and Kāsq!ague'dî claim Frog house from having had KîksA'dî ancestors, and the Qā'tcADî claim the Halibut house (Nāłx hît) from intermarriage with the Wut-cA'nîna of Kasaan. The adoption of a name does not, however, always appear to have taken place in a friendly manner. For instance, it is said that a woman of the Wucketā'n left in anger her husband, who belonged to the Ānq!a'ketān, and took the name Ānq!a'kê hît with her, so that it is now used by the Wucketā'n as well. Where a house name has not been borrowed or assumed from some other clan, its origin is traceable to a myth or legend in which the clan in question had some interest, or may refer to some peculiarity of position, construction, or ornamentation. Some were also grandiloquent expressions, indicating the power or wealth of the owner. Among the most common were names taken from a crest.

FIG. 107. Crest post of the Kā'gwAntān.

The great majority of Tlingit personal names referred to some animal, especially that animal whose emblem was particularly valued by the clan to which the bearer belonged. Thus a prominent Chilkat chief was called Danawā'q (Silver Eyes), referring to the eyes of the raven; Xaku'tc! (Shaggy) was a Kā'gwAntān name, indicating the thick, lumpy hair of the grizzly bear, and Kodê'naha, another Kā'gwAntān name, referred to the narrow entrance of a bear's den, which to a bear is supposed to appear like a large doorway. Among KîksA'dî names are Deîkta' (Frog-sitting-in-the-road); A'tats!īn (Lively-frog-in-lake); Tuksaē'q, referring to the frog's brilliant color. Other

names have been given in connection with the lists of houses in Sitka and Wrangell. Where different clans have the same emblem their names referring to it may nevertheless differ, and this distinction runs through all of their other personal names as well, so that wherever a man goes his social position is known by his name. That a man's name might occasionally be used by a woman is shown in the case of the late Mrs Dickinson, of Sitka, whose native name, ĀndA', was adopted by her because there were no males left in her clan who could use it.

The principal animals to which personal names in the Wolf phratry referred were wolf, grizzly bear, tc!īt, killer whale, petrel, and, among the northern Tlingit, eagle; and the principal animals to which personal names of the Raven phratry referred were raven, frog, hawk (kîdjū'k), black whale (yā'î), and eagle among the southern Tlingit. Wolf and grizzly bear names seem to have been used most widely by the Wolf people, the former being especially common among the Kā'gwAntān and the latter among the Nanyaā'yî, KatAgwA'dî, and the Te'qoedî. The Nanyaā'yî who used Wolf names are said to have been mainly those who had had Kā'gwAntān grandparents. Killer-whale names were used by the DaqL!awe'dî and Nanyaā'yî, and porpoise names by the TcukAne'dî. The Wolf people are said to have had names taken also from the shark, dogfish, and halibut. Almost all of the NēxA'dî names are from the eagle.

Names taken from the raven were used pretty generally by all Raven families, but seem to have existed in greatest abundance proportionally among the Łuqā'xAdî and the ĢānAxte'dî, almost all of the names employed by the former having had such an origin. Frog names were probably next most abundant among the Ravens, being of course especially employed by the KîksA'dî and its branches, but also by the Qā'tcAdî, the Kosk!ē'dî, and several other clans. The KîksA'dî claimed also brant, owl, and dog-salmon names, on account of members of that family who had gone to live with such animals. The dog salmon is also said to have been used by the L!enē'dî of Auk. The L!ūk!naxA'dî and the Q!At!kaā'yî had king salmon names, but more still were taken from coppers. The Kosk!ē'dî are said to have had some names from the black whale (yā'î), and the 'TAne'dî some from the land otter. Herring and ground-hog names were used by the Łuqā'xAdî, the swan (ǵoqL) by the L!ūk!naxA'dî and Q!At!kaā'yî and mouse names by the Kosk!ē'dî. The marten is said to have been employed by some Raven people, and the weasel occurs in at least one L!enē'dî name, Da-Lēn (big weasel). If any animal were not regularly used by some clan it could be employed without offense. Other crests, such as Mount Fairweather, TA'naku, and the island from which the Q!At!kaā'yî receive their designation, were also drawn upon for personal names by the clans to which these belonged.

As stated above, some personal names were derived from coppers. Some also commemorated certain events, such, for instance, as Djînała'tk! (rolling waves), given to a certain girl by her mother in commemoration of the place where the child's sister had been drowned, while still others were from the names of creeks and totem poles, and many people acquired nicknames not referring to any emblem. In the case of the girl just spoken of the name may have been adopted to avenge the wrong upon the place, as such things were certainly done by the Haida. At a feast a man would give his own clan names to his son's children, but the right to them seems usually to have been confined to the individuals so honored, unless, of course, they belonged to the same clan as the first owner. Sometimes, however, a new name might be coined and applied during a potlatch—one, for instance, referring to the noise made by putting on the main timbers of a house—and in that case the grandchild's clan could keep it.

SOCIAL CUSTOMS

The exogamic nature of the two great phratries and the exception in favor of one small group have already been explained. It would be interesting in this connection to have detailed information regarding the laws governing intermarriage with other people, but only a few facts were gathered. The possession of an emblem in common seems to have determined phratry relationships in cases where it occurred, but otherwise it was settled by the general phratry designation. A Haida carver living at Sitka, who is usually called "Haida Charlie," belongs to the Łînıa'l naas xada'i, of Howkan, who are part of the Salı'ndas, an Eagle family. His Tlingit wife is a Raven. The interpreter stated that it was more usual for men from the south to marry northern women than the reverse. There was a Haida woman married among the Box house people, however, and she called herself a Q!ıt!kaā'yî, because some time before other Haida had married in such a way with this clan as to place them on her own side. At Wrangell, on the other hand, we find the Raven Kāsq!ague'dî and Tāłqoe'dî considered as parts of Edensaw's family at Masset, which is Eagle. Transposition of phratries is indicated also by crests and names, for the killer whale, grizzly bear, wolf, and halibut are on the Wolf side among the Tlingit and on the Raven side among the Haida, while the raven, frog, hawk, and black whale are on the Raven side among the Tlingit and the Eagle side among the Haida. No data were obtained regarding intermarriages with the Tsimshian, and the only facts ascertained relative to the Athapascans are that those bands that were adopted among the Tlingit seem to have been taken in as Ravens. Some Tlingit married women from the Flatheads (i. e., Kwakiutl, called in Tlingit T!awiyā'tq!a).

Phratral exogamy is so common a phenomenon that we should hardly take the trouble to inquire among the Indians themselves for

an explanation of it. It may be worth while, however, to note the explanation given by Katishan, that clans "showed respect toward one another" by intermarriage. The expression "showing of respect" is often used and in the following connections: A man showed respect and true politeness to his mother-in-law or a woman to her son-in-law by not addressing her or him directly. A man showed respect to his father-in-law by working for him in exchange for having received his daughter as wife, and the father-in-law showed respect to his daughter and his son-in-law by giving a large dower. A man showed respect to his brother-in-law by returning any present the latter chose to make him with heavy interest; nor was he at liberty to decline an expensive present of this kind.[a]

Terms of relationship were naturally affected by the exogamic phratral divisions. A man called his own people "friends," those of the opposite phratry "opposites" (gonêtkanā'yî), or "my outside shell." Below are the more specific terms, with the Haida in a parallel column for purposes of comparison. The *k!* in parentheses is a diminutive ending used in an endearing sense and not absolutely essential to the word, although very frequently introduced, while the *ga* after Haida words is a possessive suffix.

	Tlingit	Haida
grandfather (applied to all men of generation before that of parents)	łł(k!) (also applied to eldest of father's brothers)	tcī'nga
grandmother (applied to all women of generation before that of parents)		nā'nga
grandchild (and all of generations following that of children)	cxan(k!)	t!akł!'nga
man's father	ic	gō'ñga
woman's father		xā'tga
father's brother (including all men of phratry of father's generation and of the succeeding generation)	sa'nî (perhaps "small," "little," meaning "little father")	gō'ñga, and xā'tga
mother (of man and woman)	la	a'oga
mother's sister (including all the women of her phratry and generation)	lā(k!) (little mother)	
mother's brother (including all men of her phratry and generation)	kāk	qā'ga
father's sister (including in general all women of her phratry and generation and of the succeeding generation	āt	sqā'nga
man's elder brother (and all older men of his phratry and generation)	hunx	k!wa'iga
woman's elder sister (and all older women of her phratry and generation)	catx	
man's younger brother and woman's younger sister (also all younger men or women of same phratry and generation)	kīk!	daoga'nga

[a] At Sitka the usual rates of interest were as follows: For three dollars five dollars were returned, for five dollars eight dollars, for ten dollars fifteen. This return might be made at a feast or outside.

	TLINGIT	HAIDA
man's sister (and women of his phratry and generation)	ɮāk!	djā'sga
woman's brother (and men of her phratry and generation)	īk!	dā'ga
mother's brother's children	kāł(k!)	(descriptive term)
father's sister's female children	āt	(descriptive term)
father's sister's male children	SA'nī	(descriptive term)
son (and men of same phratry and generation as son)	yīt	gī'tga
daughter (and women of same phratry and generation as daughter)	sī or sī(k!)	gudjā'ñga
sister's child	qēł(k!)	nā'tga
brother's child (said by woman)	(?)	(descriptive term)
Relations brought about by marriage		
husband	xox (also applied to husband of sister, who became really such if latter died)	LĀ'lga,
wife	CAT (and reciprocally as above)	djā'ga
father-in-law	wu	qo'naga
mother-in-law	tcān	djigonā'nga
brother-in-law (said by man)	kā'nī	qea'ga
sister-in-law (said by woman)		djī'ñaga
sister-in-law of man and brother-in-law of woman	xox and CAT (as above)	łī'ñago
son-in-law	(descriptive term)	qo'naga

(Many of these were also extended to cover other persons of the same phratry and sex)

In addition to its great house in town each Tlingit house group usually had its salmon creek or portion of a salmon creek with accompanying smokehouse, whither the people resorted in spring and summer to dry fish, to hunt and trap. The mountain valleys where ground hogs were found, the strips of coast on which were collected shellfish, the halibut banks, and the berrying and root-digging grounds were in many cases also owned by clans and families. Others were unclaimed and free to all. Clans that had no land must resort to the common grounds or wait until the owners of others were through with them.

Months were named with reference to the changes in nature, especially the movements of animal life, which bore directly upon the economic life of the people. Following are lists of these names obtained at Sitka and Wrangell, with the native explanations retained even when they are contradictory. The writer's Sitka informant began his enumeration with the moon corresponding to August, and his Wrangell informant with January, but they are placed opposite each other for purposes of comparison, following the Sitka order as probably the more ancient.

Month to which the term roughly corresponds	Sitka	Wrangell
August	Câxīyl', because all birds then come down from the mountains.	Qoqaha' dis, "month when all kinds of animals prepare their dens."
September	Dis ya'di, "small moon," or "moon child," so called because fish and berries then begin to fail.	Dis ya'di, "moon child," or "young moon."
October	Dis lên, "big moon," because the first snow then appears on the mountains and bears begin to get fat.	Dis lên, "big moon."
November	Qoqā'ha dis, month when people have to shovel snow away from their doors.	At qôwu' disi, moon when all creatures go into their dens; or Cê'nax dis (said to mean the same).
December	Ca'nax dis, month when every animal on land and in the water begins to have hair in its mother's womb.	Sax-la di'si, "ground-hog mother's moon."
January	Tlā'waq di'si, "goose month," because it is that in which the sun starts back and people begin to look for geese.	Tlā'waq di'si, "goose month," perhaps so called because the geese were then all at the south.
February	Sīk di'si, "black-bear month," the month when black and brown bears begin to have cubs and throw them out into the snow.	Sīk di'si, "black-bear month," the month when the black bear turns over on the other side in his den.
March	Hīn tā'nax kayā'nî di'si, the month when "sea flowers" and all other things under the sea begin to grow.	Gat di'si, "silver-salmon month." The reason for applying this name is unknown, as it is not their proper month.
April	Qē'ga kayā'nî di'si, "real flower month," when flowers, nettles, etc., begin to show life.	At ga'daxet yī'na di'si, "month before everything hatches."
May	Djinkā'ta, "tenth month," when people know that everything is going to grow.	At ga'daxet di'si, "month when everything hatches."
June	Dji'nkat wanā'ka, "eleventh month," the month of salmon, and so also called xāt di'si.	Caxeyê' (meaning unknown; see August in Sitka list).
July	At ga'daxēt di'si, "month when everything is born."	At gata' di'si, "month when the geese can't fly."
August (part of)	At gata' di'si, "month when everything born commences to fatten."	

The thirteen month names in the Sitka list probably represent the number of months formerly reckoned, agreeing in this respect with

the Haida calendar. Four names, it will be seen, correspond precisely in both lists, while five other names are the same but are not applied to corresponding periods, and the names are sometimes interpreted differently. The Chilkat were said to count all the months instead of naming them.

Few of the constellations or stars appear to have been named. The Great Dipper, which used to serve as a guide at night, was called YAXtê', the Pleïades were called Wēq! ("sculpin"), and three stars in a line—probably the belt of Orion—were known as nA's!gînAX-qa ("three-men-in-line"). Venus as morning star was called Kēq!A'cAguḷî' ("morning-round-thing"), and Jupiter (?) as evening star, K!uxdî'sî, a word which seems to mean "marten month" or "marten moon." If the morning star comes up over a mountain southeast of Sitka it means bad weather; if well over in the east it means good weather.

The clan divisions already treated ranked differently in the social scale. Among the very highest were the Kā'gwAntān, KîksA'dî, Ǵānaxa'dî, Łuqā'xAdî, and Nanyaā'yî; and the importance of these was evidently due in the first place to the size of the towns to which they belonged, and more remotely to the position of those towns relative to trade routes. On the other hand, several of the smaller groups, such as the TcūkAne'dî, were looked down upon as low caste, and the same was true of certain persons within the large groups.

Difference in caste was, of course, associated with etiquette and confused with morality, so that actions that did not come up to the moral standards of the majority of the people were spoken of as "low caste." At the same time one of the writer's informants insisted that a person of high birth would also be considered low caste if he did not conform to these standards. According to the unwritten Tlingit law it was incumbent upon everyone belonging to a phratry to house and feed any other member of that phratry who should visit him, no matter from how great a distance he might come. We can easily understand that such hospitality might be very seriously abused, the guest extending his visit so long as to become a great nuisance if not a serious burden to his entertainer. For this reason such an extension of the visit was said to be the mark of a low-caste person, even if made by a person of high caste, and such an individual was called by a special term of contempt, (n)îtcka-qā'wu. When a person sat down it was good etiquette not to lean back, but to keep the feet together and the body forward as if one were ever ready to move. A disgraceful act was felt so keenly by members of the offender's family that he might be killed for it or, what was perhaps worse, degraded in the eyes of all of his people. Moral standards were very different from ours, so much so that their existence among Indian tribes has often been denied, but so far as the Tlingit are concerned, it is easy to see that very well defined moral standards did exist, to which a high-

caste person was especially expected to conform. The social customs and laws permitted, it is true, great looseness in sexual relations and encouraged stinginess and treachery toward others, but that was due to a standard of morality low in certain respects, not to the absence of a standard. On the other hand, property rights, except in time of war, or occasionally in time of potlatch, were respected with a care which many in the same region would rejoice to have prevail at the present day. It is even said that it was a disgrace to tell a falsehood, and, if we bear in mind the native idea of what constitutes a falsehood, there is no doubt truth in the statement.

As among other American tribes, a girl at maturity was secluded and had to undergo many observances supposed to affect her future life, as also the existence of people about her. Her look might destroy the luck of a hunter, fisher, or gambler, turn objects into stone, etc. Therefore at that time she is said to have been secluded in the house for from two to three months without ever going out.

When a youth desired to marry a certain girl, or when his friends desired to have him do so, the latter went in a body to the girl's mother and her clansmen. Then his mother, sister, or uncle said, "I value the words I am going to speak at forty blankets. If you are willing, kindly accept them." The mother replied, "Perhaps two days later I will speak to you." That time having elapsed the youth's friends went thither again and said, "Will you accept my words?" If she consented to the match the girl's mother said, "Yes," after which the boy's friends left the blankets or money they had before promised. Afterwards the boy, his mother, and their friends brought together many blankets and took them to the girl's mother. The giving of property in this way to a man's mother-in-law or father-in-law was called doā'ye aosî'ne ("putting gifts on back"). Upon this the girl's father sent a message to his daughter's people to come in, and he distributed among them everything thus received except a small amount reserved for himself. After that he had to turn round to the boy's friends and give them a certain amount in the way of dower in order to show his daughter proper respect and to show that he valued her. Then the girl was asked if she were going to behave herself, and they said to her, "You are now able to take care of yourself and know how to save and how much you can earn." If, after a while, the girl did not behave her husband whipped her, and when she ran away to her friends they whipped her again for giving them shame.

The boy's uncle also had to talk to him, saying, "You must get up early and look for your food or in time your wife will be running around with other men and want to marry someone else, and you will be ashamed. Do not drink too much water or it will make you lazy. Do not sit with your legs stretched out in front or you will have to turn over to get up. Always take care of your wife. Do

not keep going into someone else's house to ask for things, but be an independent man so that I shall not be ashamed of you."

Sometimes a man did not get ahead, and his wife went about with other men. This brought shame to both sides, and so people always instructed their sons and daughters that it might not so happen. And so, if a man's hand "looked like an eagle's" (i. e., was rough from work), he was taken for a son-in-law quickly. "As soft as a mat (or carpet)" was said of the hand of one who did no work.

Before a woman gave birth to a child she did certain things to make her delivery easier. Slaves also had to hold her and ease her pains. It would bring a man ill luck to have a child born inside of his house, so a hole was always dug for the woman behind the house, inside of a little hut or shelter made of branches. There she was obliged to go for her confinement, regardless of the weather. The person employed to dig this hole and the nurse who attended on the woman in addition to the slaves must belong to the opposite phratry.

If a very dear relative had passed away, people often took the nail from the little finger of his right hand and a lock of hair from the right side of his head and put them into the belt of a young girl of his clan just reaching maturity. Afterwards she had to lead a very quiet life for eight months and fast for as many days, unless she were delicate, when half as many sufficed. In the former case she fasted steadily for four days, rested two days, and then fasted for the remaining four. After her fast was over, and just before she ate, she prayed that the dead person would be born again from her and also that she would marry well and live a good life.

As soon as he entered the world a child's navel-string was cut off, placed in a bag made especially for it, dried inside of this, and hung about the child's neck until he was eight days old. In the case of a boy the navel-string was placed under a tree on which was an eagle's nest, so that he might be brave when he grew up.

The minute a child cried its breath was caught in a bag. Then the bag was carried to a place where many people were passing, so that it might be trodden under foot. This prevented the child from crying much when it grew older.

If a woman wanted her girl baby to become neat in later life, she put on her breast the borings that come out of a woodworm's burrow and let the child suck this substance along with her milk. Red paint was put on a child's nose to make it strong.

As soon as a person died his body was set up in the house, and his friends showed their respect for him by cutting or singeing off their hair just below the ears and by piling their property around the corpse. They said, metaphorically, that they gave it away or "burned it" for him because they loved him so much. Guards were placed around the house all night, so that no wizard could get in to him. When the dead

person was very much thought of, all his clansmen of both sexes dressed themselves in their best blankets and stood in front of the town just as the sun was setting, each bearing a cane made out of a young tree, the bark on which had been stripped up to one end. Just as the sun neared the horizon all held their canes out straight with the small ends toward it and moved them slowly upward to keep the sun up a little longer. Then each would give utterance to some wish or prayer, such as these: "Let me be rich," "Let me come across sea otter sleeping," "Let me kill seal," "Let me kill land otter."

When it was time to remove the body, the clansmen of the deceased invited those of the opposite phratry to smoke—or, in olden times, chew—tobacco with them. Then speeches were exchanged, after which those invited carried the corpse out through an opening in a rear corner of the house made by removing a wall plank. All the duties of an undertaker were performed by the opposite phratry, for it was not considered respectful to them to invite one's own friends for this office. Just after the body had gone a dog was thrown through the opening made for it. According to the writer's Sitka informant a dead dog was thrown out and afterwards some sand, the former to protect the deceased from the many animals which beset the trail he had to follow and the latter to form a path in front of him. According to Katishan a dead puppy was first thrown through the opening, and the people followed it out strewing ashes, all for the purpose of driving away evil spirits. According to another informant at Wrangell a live dog was thrown out in this way so that the dead spirit or ghost, as distinguished from the living soul which travels on into the other world, would go into the dog instead of into a human being, for if it went into the latter the person would die.

After this the corpse was usually burned, so that the deceased might be near the fire in the "Ghosts' Home." Otherwise he had to remain far back in the house, and shake all the time, no matter how many blankets he wore. Sometimes the body of a very brave man was not burned, because he was thought to be too valiant to care to stay around the fire like weak people. Other persons might also prefer to have their bodies set away intact, but, if a friend of one of these dreamed that he had come to him and complained of being cold, his body was taken up and burned. Before being placed upon the pyre the body was turned around four times in the direction which they conceive the sun to take, just the reverse of its motion as we understand it, and finally laid down head to the sunrise. This was to enable the deceased's soul to be reborn, for, if it were laid head toward the sunset, he would never come back. Shamans' bodies were placed upon points along shore, just where their spirits had directed. Some bodies, probably those of shamans, were removed through the smoke hole.

Last of all came a mourning feast to members of the opposite phratry. Just before food was distributed a little was held up, the name of the dead pronounced, and the food put into the fire. Then a great quantity of the same kind of food was believed to pass to the man whose name had been mentioned. If he received considerable in this way he was proud and happy; otherwise he was ashamed. All of the property given away or destroyed at a feast was dedicated to some dead person who then actually received its spiritual counterpart. Sometimes a man dreamed that his dead uncle came to him and said he was hungry, when he had to give him a feast. In fact, it may be said that these feasts were supposed to be partaken of by men and spirits at the same time, and constituted a sort of communion between them.

FIG. 108. Model of grave post surmounted by grave box.

FIG. 109. Model of grave post having grave box inserted in the back.

The bones of the dead were placed in mortuary houses or on poles, both of which were put up during the feasts just referred to. In the latter case they might be put into boxes supported by either one or two posts, or in cavities excavated in the back of the post itself. Sometimes a memorial pole was set up in one part of the village, while the ashes were in a mortuary house elsewhere.

Figure 108 illustrates a grave post with box placed on top. It was erected at KAq!anuwū' for one of the Kā'gwAntān called Stuwuqā' ("Wants-to-be-higher-than-other-animals," referring to the wolf), who died by violence. The box itself has a figure of the gonaqAdē't's face painted on both sides, this being a Kā'gwAntān emblem, and on the top of the lid, now unfortunately missing, was a figure of the dead man's head. This was painted half black and half red. The hole cut through the pole below represents that by which the highest heaven is reached (see p. 461), the human figure, the being supposed to keep watch of it, and the faces on each side of the hole grizzly bears which infest the spirit road.

Figure 109 has the body placed in a hole in the back. It was erected for a Tcūkane'dî chief called Dāxugē't ("Outside Dry," referring to the fact that the porpoise is dry on the outside almost immediately

FIG. 110. Grave posts at Wrangell.

after coming out of the water), and the figures are as follows: The main figure represents Cākanayî' ("Mountain Dweller"), a mythological being supposed to live in the mountains who was a great hunter and was himself a Tcūkane'dî. Above him is his dog and at the top an eagle.

In Krause's Die Tlinkit Indianer, page 132, is a copy of the original of this figure, from which it appears that the maker of the model has omitted one of Mountain Dweller's dogs and another small figure. Krause appears to be in error in calling the uppermost figure a hawk

FIG. 111. Grave post at Wrangell.

and the small figure above Mountain Dweller a seal. The Tlingit word for seal is different and that given here (ssāch) would appear to be s!Ax̣, starfish, or perhaps s!āx̣", hat.

The larger pole in figure 110 was put up at Wrangell by Katishan's brother. At the top of this is Nās-cA'kî-yēł (Raven-at-the-head-of-Nass-river), the highest being in Tlingit mythology, with Raven (Yēł) on his breast. Below is another being, ŁAkîtcînA', wearing a hat and the red snapper coat with which he used to murder his children, underneath the frog, emblem of the KîksA'dî, and at the bottom the thunder bird (x̣ēL), which stands for Łq!ayā'k!, ŁAkîtcînA''s son. The smaller post in this figure was copied from a dancing cane, which came from the Haida (see p. 417), and is very highly valued. From above down the figures are: eagle holding two coppers, gonaqAdē't holding a copper, frog, sand-hill crane (dūł), frog, gonaqAdē't. Another Wrangell pole, carved to represent an eagle holding strings of fish on a rope, illustrates the story of Man-that-dried-fish-for-the-eagle (Tcak!-q!ē'dî-At-q!An-qa) told by Katishan.

Figure 111 illustrates the story of Black-skin or Kahā'sli. The hero is represented in the act of tearing a sea lion in two.[a]

The chiefs' hats so often shown upon poles appear sometimes to be more important than those wearing them, the latter being slaves or figures introduced merely to carry the hats.

POTLATCHES

Superficially the Tlingit potlatch resembled that of the Haida, but with the former only one motive underlay the custom, regard for and respect for the dead, and there was but one kind of potlatch in consequence. The putting up of a house or pole, and the secret society performances, feasts, and distributions of property which accompanied it,[b] were all undertaken for the sake of the dead members of a man's clan, and to them every blanket that was given away and a great deal of food that was put into the fire were supposed to go. It was believed, as indicated in the last section, that the souls of the dead were actually present and feasted and rejoiced with the living, receiving spirit food and spirit clothing along with the reception of their material counterparts by men on earth. Whenever a blanket was given away a dead person had to be named, and he received a blanket in the spirit world; whenever a little food was put into the fire and a dead man's name pronounced, a great deal of the same kind of food was received by him.

Among the Haida, on the other hand, the social idea quite overbalanced the religious. When a man took the place of his dead uncle or brother he was indeed obliged to give a feast and make a distribution of property to those of the opposite phratry, and the latter acted as undertakers; but this potlatch was of very much less importance than the great potlatch which a chief made to his own phratry, which was purely social in purpose and intended only to increase his reputa-

[a] All the stories referred to in this paper are to be published later in the form of a bulletin.
[b] According to Katishan, however, piercings for labrets were made at another time.

tion and advance his standing. The idea of giving property to a member of one's own phratry or of employing him in putting up the house was altogether abhorrent to Tlingit notions of propriety. A Tlingit employed his opposites to do everything—to put up his house and pole, pierce the lips and ears of his and his friends' children, initiate them into the secret societies, etc. If he did not "show respect" to his opposites by doing so, with the intent of not being obliged to pay much property, he was looked down upon by everybody. The same thing might happen if not enough property was received by the phratry invited. Once the L!ūk!naxA'dî did not give away enough food to satisfy some of their guests, so the latter took three or four high names from them by way of retaliation.

When the people were assembled for a feast, the feast giver and his friends stood at the inner end of the house, which was the place of honor, and also around the door, and his guests ranged themselves in two parties facing each other at the sides. The division of the guest phratry at this feast was evidently based on supposed consanguinity. If people were invited from another town they formed one party and the town people the other; if only the town people were invited, they, of course, had to divide into two bands. At Sitka this division was as follows: If a Raven chief gave the feast, the Box-house people danced on one side of the fire and the Wolf-house and Eagle's-Nest-house people over against them, all being Kā'gwAntān. If a Wolf chief invited the Ravens, the KîksA'dî danced against the L!ūk!naxA'dî and Q!Atkaā'yî. At Wrangell the Qā'tcAdî, KîksA'dî and Tī hît tān stood on one side when Ravens were called and the Kāsq!ague'dî and Tāłqoe'dî on the other. When Wolves were summoned, the Nānyaā'yî and Slīknaxa'dî stood on one side; the Xoq!e'dî Kayā'ckidetān and later probably the Xēł qoan opposite. The visitors paid for their entertainment, so to speak, by assuaging the host's grief through their songs and dances. Great rivalry was always exhibited by the two parties, however, and their endeavors to outdo each other sometimes almost resulted in bloodshed. Each side attended carefully to the slightest remark made by an opponent, especially by the two song leaders with which each was provided, and the least slight, though couched in the most metaphorical language, was at once seized upon and might precipitate a riot. The actions of each dancer were also scrutinized with great care, and any little mistake noted and remembered. The strain upon a dancer was consequently so great that, if a fine dancer died soon after the feast, it was said, "The people's looks have killed him."

Crests were a favorite subject for representation in the dances, the dancers appearing clad in appropriate clothing, masks, etc., and giving imitations of the actions of the crest animal or object. Even crests difficult of representation, as the mountain TsAłxā'n and the rock TA'naku

(see p. 418) were imitated. The T!A'q!dentān, who alone had a right to use TsAłxā'n, represented the manner in which clouds stopped part of the way down its sides when the weather was going to be fair or went all over it when it was to be bad weather. When they met the Chilkat people in dances, those from Sitka and Wrangell danced the Tsimshian dance and the Chilkat people the Athapascan dance.

Masks were used in the shows (yîkteyî') which each clan gave at a potlatch, but they were not valued as highly as the crest hats and canes. The KîksA'dî at Wrangell would show masks of the sun, of various birds, such as the eagle, hawk (kîdjū'k), and flicker (kūn), and of animals, such as the bear, wolf, and killer whale. The Nanyaā'yî showed masks of the killer whale, shark, ground hog, grizzly bear, and gonaqAdē't, and the Kāsq!ague'dî the gonaqAdē't, Nās-cA'kî-yēł (see p. 434), the owl, and the land-otter man (kū'cta-qa).

Secret society dances were imported from the south, as the name łuqAna', evidently from Kwakiutl LU'koala, testifies, but their observance had by no means reached the importance attained among the Kwakiutl and Tsimshian. At Sitka the writer heard of but one man who had become a łuqAna', a KîksA'dî named MaawA'n. He said that the łuqAna' were spirits who came from the body of the łuqAna' wife of the Sun's son, a cannibal woman referred to in one of the chief Tlingit stories, who was broken to pieces and thrown down by her husband. When they came upon him, they would fly along through the air with him. They forced him to eat dogs and do various other things, and they made him cry "Hai, hai, hai, hai." Once, as they were flying along, they left him suddenly, and he dropped upon the side of a cliff where he hung on the point of a rock by his cheek. At the time of his possession people ran around with him with rattles and sang certain songs to keep him from going away, and they also sat on the tops of the houses singing. All this was to restore him to his right mind. At Wrangell the łuqAna' performances seem to have been better known and to have existed in greater variety. A man could imitate any animal except a crest of some other family. As was the case farther south, whistles (łuqAna' doA't-cî) were essential concomitants of the secret society dances.

How far the element of pure entertainment entered into secret society performances is uncertain, but it figured largely at the feasts in other ways. A Sitka man once became displeased at something, started off, and became a mountain called Āwatī'nî-qa (Man-that-went-away-forever-because-he-was-sad).[a] Because this man belonged to the Sitka KîksA'dî that family does not allow anyone to mention the name of this mountain during a feast. If he does they make him

[a] When one says, "There is a cloud on Āwatī'ni-qa (Āwatī'ni-qa yēt ā'wacat)," people know it will be bad weather. If a cloud lies up against it, the weather will be fair; if the cloud goes up against it and disappears, the weather will be stormy.

drink so great a quantity of grease that he usually throws it up, and is very much ashamed in consequence. The sufferer is paid a double amount, however, in the distribution of property.

On the other hand, the stream where ex-Governor Brady's sawmill is situated, called Killer-whale's-dorsal-fin river (Kīt-gū'cî hīn), belonged to the Kā'gwAntān. When they were about to have a feast those people said, "Killer-whale's-dorsal-fin river is running over (Kīt-gū'cî-hīn yenawA'L!), and then one had to be careful, for if he spoke about that creek he was called out and treated as in the other case. Nowadays, however, the river is made fun of, because it is so small. The big Chilkat tray, to be spoken of later, was used in a similar sort of merrymaking.

A feast was prefaced by considerable fasting, in order to bring good luck to the various persons concerned. When a house was being put up the owner fasted and after it was erected he had water-soaked animal stomachs thrown about among the people in the house, at the same time wishing for wealth. Before her lip was pierced for the labret a woman fasted, for otherwise she thought that the hole would spread and take her mouth entirely away. The broad labrets are said to have been made by old women, but the long ones by men to give to the women they were in love with. When he was about to undertake any task a man who had eight house posts in his house had to fast eight days, one for each post. Slaves were always killed and their bodies thrown into the holes in which the house posts were to be inserted.

The copper plates used all along this coast changed hands in potlatch time. Anciently they are all said to have come from Copper river, and when first made they were valued according to their height, some at four slaves, some at six.

Many of the potlatch songs were naturally in memory of the dead, and according to Katishan the most valued of these were composed at the time of the flood and record the sad events that happened then, such as the finding of bodies when the waters went down and the parting of the clans on that occasion. These were very solemn songs and the people thought that they received strength through them. They were never sung on ordinary occasions.

There were plenty of modern songs, however, to record any event, trifling or important, and composed with every sort of motive. If a man's near relative, such as his mother, died, it is said that a song was made up inside of him, where it worked until it came out. "It is not through a man's own will, but the way that Raven made people that brings forth a new song when people are called together after one has died." These songs often dealt with the place whither they thought their friend had gone. There is a Kā'gwAntān song called cā'q!aciyî', sung almost as a woman sings, which was used only at potlatches.

At the beginning of a potlatch, when a house had just been completed, all the host's friends assembled inside of it and "danced it together" by making motions four times to the right and four times to the left as they danced. These motions were accompanied by as many songs.

The following is an account of a feast at Chilkat, substantially as given by Dekinā'k!ᵘ, an eyewitness and participant. The givers of the feast were Yēłgū'xo and Yēłxā'k of the Raven people of Klukwan.

After Yēłgū'xo's house was completed his wife came down from Chilkat with leaf tobacco to invite the Sitka people. The first house named was the Wolf house (the house of Ā'naxūts!, chief of the Kā'gwAntān), and they named all the houses up this way (that being the Kā'gwAntān end of the town). In the evening she invited all to supper. When they were all seated in the house, she began distributing leaf tobacco and the guests smoked. Then the woman, and those friends who came with her, rose and delivered the invitation. When the meal was over the town people danced before their visitors by way of payment. They took out all of their crests—such as hats, woven blankets, and emblem shirts—before the visitors, in order to show them respect. Next day she again feasted them and again they danced for her. The morning after that the woman took a piece of charcoal and threw it outside as an invitation to her people to give her property. She asked for this in order that they might feel just as good as the Klukwan Wolves who had built her husband's house, for those of Sitka had not had a hand in it. The woman was sent to them because she also was a Wolf. Had the host lived in the same town he would have sent a brother-in-law instead. So the people went to her that morning and placed before her $1,000 worth of property. The woman knew, however, that her husband was very rich, so she demanded more than $2,000 worth, and obtained it.

After they had made ready their dancing hats, bark rings for the neck and head, etc. all started off and their hostess followed them. They had four dance leaders, and at every place where they camped they practised dancing. While they were going up the dance leaders had to fast for two days and for some time they had to keep away from women; otherwise they would not live long. When people invite others they say, "We will have a war dance together," in order to scare them, meaning thereby that they will have a dancing and singing contest. So the dance leaders had prepared themselves by fasting, abstinence, and the manufacture of medicines made of flowers, as if preparing for war. When they went along to a potlatch the canoes of visitors would divide and rush together as if they were fighting, brandishing wooden knives. They would also, especially if a powerful clan like the Kā'gwAntān, plunder canoes or even towns of their provisions. At this time they carried away all the potatoes from Killisnoo.

When they were very close to the town their hostess told them to go ashore, so that she might give them the last meal. On reaching Yêndê'staq!ê, the town at the mouth of Chilkat river, a cannon was fired off to stop them, because Chief Dānāwā'q! wanted to feast them also. He gave them twenty large boxes of eulachon grease, part of which he distributed and part he gave them to drink. They drank this excitedly and impetuously, snatching the boxes from one another in their eagerness. Then all the visitors, men and women, danced before this chief to pay him for his hospitality. They had great sport. When they camped halfway up to Klukwan two cannon were fired, but they were still too far off to be heard. When they started up again next morning the news had somehow or other reached Klukwan, and many came down to help them by fastening ropes on the canoes and pulling them along from the shore. That day they camped in sight of Klukwan, and both parties began welcoming each other by firing off cannons.

Next day the two givers of the feast started down, accompanied by all their friends, and they brought along twenty boxes of eulachon grease and twenty more of berries, as well as firewood. They also brought the crests and left them overnight there, as a sign that they would be safe with the guests. Next morning the Klukwan people went down to see the Sitka people dance. Four songs had to be made for this dance, and after the fourth was sung the Klukwan people went back to prepare for their own dance.

When the visitors reached Klukwan the first man to come out of the house was Yēłxā'k, who wore a hat provided with ears and covered with abalone shell. He had a bow and arrows in his hand, and as he came down he kept making the motions of letting go an arrow. He did this because he was about to spend a great quantity of money and wished to show how brave he was. Yēłgū'xo came out next. On his head was the Raven hat, and he was leading a number of women. Meanwhile men appointed for the purpose kept firing cannons. Finally all of the people were taken into Raven house (Yēł hît), Black Whale house (Yā'i hît), and Valley house (Q!āk hît).

When guests from foreign towns were going to dance everybody left home and crowded into the dance house, where they were made welcome, and great fun went on. It was customary for the visitors from another town to dance first, so the Sitka people began coming in singing the Tsimshian song. One man stood just inside and one just outside, as watchmen. They sang, "There is a rich man coming. He is on the way." When they were halfway through singing the words, the Sitka chief (Thom) entered dancing. After that the Klukwan Eagles danced in their turn. There were three families, the DAqL!awe'dî, Taqêstîna', and Kā'gwAntān. First a man came in acting like a bear.

He was trying to catch a man in front of him with his claws, and they had also set up a tree for him. After that a person entered acting like an old Athapascan woman catching a fish under the ice with a fish rake.

Those who had invited the people said, "All the people shall not eat to-day. A day shall pass before they eat." This is an old saying which means exactly the reverse. The people who were invited were called by different names, those from Sitka being called "Man-of-war's guests."[a] After they had gotten all of the guests ready to eat, they served roasted salmon first, because the chief for whom this feast was held had been very fond of it. There was still plenty of salmon at Chilkat, although it was cold. After the next dance a still larger feast was given. Then one of the chiefs announced, "The people that I invited as guests are going to eat out of Wu'tcxtaga (a dish). The people that stay at home (i. e., the Klukwan people) are going to eat out of Mother-basket (kak^{u} la)." Then all the guests seated themselves on opposite sides, wearing their valuable hats, and the empty dishes lay in front of them turned over. After a while one got up and said to the host, "Your opposites are going to try to drive your sorrow away." They said this because they were going to dance with the dishes in front of them. When people dance in this way, if one side makes a song more than the other, it precipitates a fight, and that is why the givers of the feast have to stand at the rear of the house and at the side close to the door, with crests, so that there will be no trouble. The contesting sides indicate that they want to dance in peace by saying to each other, "I am holding your daughter's hand."[b]

The song leaders on the Sitka side were Na'sk!ī-īc and Ta'k!a-īc, and, when they started the songs, the latter said, "A well-made halibut hook will be taken out into the water." This meant that he knew every kind of song, and the opposite people were good for nothing. As soon as he heard this, a Klukwan man named Qāuctê' turned round and asked his wife for his knife, and a fight was imminent. The Sitka people, however, asked the man wearing the Raven hat to call like a raven, and when he said "gā" the disturbance ceased.

After that a dish was brought out as long as the lower arm and hand above the knuckles. The food in this was divided through the center and was to be eaten by two young men of Sitka named Cānukasayî' and Kātc!ātî', who had prepared themselves by fasting all that day and the night previous. Disagreeable things and things such as a person liked were mixed together in these dishes. After the people had all seated themselves, they took this dish, called out the names of the two men, and set the dish before them. When Cānukasayî' was named, he rose and said to the host, "Am I to eat this dishful?"

[a] The word for man-of-war, yê'nawâ, is simply a corruption of the English term.
[b] The daughter of one Wolf man being the wife of another, and vice versa.

The chief's nephew jumped up and said, "Eat it up. Eat it up." Cānukasayî' said, "I wanted to eat this dishful before the Wrangell people but not before the people up here." He said this because the Wrangell people were enemies to those of Sitka. Then the chief's wife rose and said to him, "I want you to eat all the food in that dish. When I was in Sitka with the news, your brother said to me, 'What dish are we going to eat of when I arrive at Chilkat?' Your brother is not here, but as you are here I want you to eat up the food in that dish." (His brother had been taken sick and so was unable to go, leaving the duty or penalty to fall upon this man. If a person merely whispered to anyone before a potlatch that he was going to eat all the food in this dish, it was quickly reported at Chilkat and he was called upon to do so. If he declined he became a subject for ridicule. It was the same regarding any remark dropped before a potlatch. There were also eating contests between two individuals, each of whom strove to empty the contents of his dish first. Sometimes a man's name was called out and all the food in the tray passed to him was eaten before the tray reached him. In these various sports the people threw grease on one another and all over the floor.)

Kundułca't, who was considered a great eater, wanted to get at this dish very much, but he was not selected. Then the young men set to and almost succeeded in eating up the food, but not quite. The feat has never been accomplished. The Chilkat people made so much fun of them while they were eating that they concealed the tray and held it for payment until Thom, the Sitka chief, told them to give it up.

After another song, the big basket called Mother-basket was brought out and set before the people of Klukwan. All of the guests ate with horn spoons that had belonged to the dead chief. After a feast has gone on for some time and people know that the hosts are hungry, they invite them and their wives in turn. The hosts and their wives sleep with their blankets gathered up around their waists.

Next morning the Sitka people were all taken into their hosts' houses to talk with them about taking up the bones of the dead, putting them into a box, and erecting a carving over them. The host asked his visitors to do this, and they performed the service just before the gifts were given out. That was the reason for the feast, and the reason they were summoned.

Now is when the host takes charge of the sport, so next morning two cannons were fired off, and the host told the women of his clan to dress up. He did this so that his guests might know that he was feeling happy. So all the women of that clan put on carved headdresses ornamented with abalone shell, and other good clothing. Around the floor of the house were laid all of those mats that the uncles and mothers of the hosts had formerly used for their guests to sit upon, and one chief had hung up his mother's blanket behind the

guests so that they would feel happy.[a] When the guests came they said to them, "Up to the rear of the house. You will sit on my mother," etc. Any property that the man had left by his dead brothers, uncles, or mother he took out before the people. If he had nephews, nieces, etc., he brought them out also at that time. The chief himself also wore the earrings and other things he had received from dead members of the clan, which he wanted to let the people see. They said that "he spent so much money to let the people see them." It is said that Yēłgū'xo at this potlatch gave away $6,000 worth of property, and Yēłxā'k $5,000 worth, besides the usual sums brought in for previous distribution by other members of their clan.

On the second night, just before they started the song for the host when he was about to give his things out, the people were served with food of the finest kinds. (The people sometimes sat in the potlatch house for two days steadily.) A long cloth was stretched out across one end of the house and Yēłgū'xo came out behind it wearing a hat named Ku'cta-xoste'yî-qa (Man-that-became-a-land-otter). In olden times his uncles and grandmothers had used it, and for that reason he "killed" $6,000 of his property when he brought it out. He had the property that he was going to give in return for what his wife had gotten in Sitka all placed out first, and it was just double what she had received.

This was the custom when people sang. If one did not know how to start a song he would ask somebody in the rear of the house to do so, and pay him fifteen or twenty blankets or the same number of dollars. While the other property was being gotten out they paid the principal guests one or two hundred dollars apiece just for dancing. Sometimes a man felt dissatisfied with what he had received and started to walk out. Then the host went in front of him "with a dead man's name" (i. e., mentioning the name of a dead relative), made him sit down, and doubled the amount of property given to him. It took four days to give out the blankets. As a man's name was called out he would answer "Hade'" ("this way"), equivalent to English "here." At such times the host brought out his brother-in-law or his child and put him on the property before it was distributed. This was to make him high caste, for it would be afterwards said of him that so many blankets "were lost to see him."

The last feast, the one which takes place after giving out the blankets, is called Ānwū'wu ("town food" or "food-that-keeps-the-town-alive"), because what they then eat is the home food. Berries, grease, dried eulachon, dried salmon, all kinds of berries, boxes of crackers, oranges, apples, figs, etc., were brought out.

Finally the guests "left a dance" in that place, to show respect for

[a] In olden times they used to kill slaves just as the guests came into the house.

their hosts, and they danced for many days. When they started for Sitka their canoes were overloaded.

At the last dance the people contended to see who knew the greatest number of songs and which side could last the longer. If one song leader broke down in a song or left some part out it counted against his side. Several boxes of crackers and several trays of grease were also given out for the guests' lunch on their way home.

Sometimes, instead of inviting people to his own town for a feast, a man took food to the town of those he desired to honor. It was called Taking-food-to-another-town-to-give-a-feast-in-memory-of-one's-mother (DuLa' naoq!ē'dî djî'udîxa).

A grave post and house were not necessarily put up at the same time. A man might put up the former first and then accumulate more property until he had sufficient for the house. Nor was it necessary that he should put up a house at all.

GAMES

The stick game (cīs) was similar to that played by the Haida and Tsimshian. The number of sticks varied considerably, because many were held in reserve, so that the player could change his luck by changing the sticks. Often a player had certain favorites with which he thought he was always lucky. There are said to have been sometimes as many as 180. The sticks themselves were divided into sets by various markings and the trump stick, called nāq (devilfish), was carefully distinguished from all others. Only one of these was necessary, but usually a set had several, so that a man might change if luck ran against him.

As among the southern coast tribes, two players sat opposite each other and handled the sticks alternately. One player selected three ordinary sticks (cīct) along with the nāq, shuffled them up in shredded cedar bark, and made two parcels, one of which he laid down on each side. The opponent chose one of these and if the nāq happened to be in that pile it was his turn to shuffle. If he missed, the opponent tried again, and, luck serving him, kept on until the tenth or eighteenth time. At this count the shuffler had to make three piles, of which his opponent was at liberty to select two, and only lost in case he then missed the nāq. The game in which the critical count was 18 was called DAxk!ū'ts; the other Kune'. The Tlingit probably counted like the Haida, i. e., each successful guess counted 1, and the opponent had to score it off by a corresponding successful guess and then count 10 or 18 wins more.

All of the gaming sticks received names, which are said to have been much the same all along the coast. At any rate djîl, by which name the nāq is known among the Haida, evidently means "bait," and devilfish formed the principal bait for halibut.

A set of gambling sticks obtained by Lieut. G. T. Emmons, and now in the possession of the American Museum of Natural History in New York, contains, among others, the following-named sticks, as ascertained by him. The writer has added the phonetic equivalents and introduced one or two minor changes in translation that seemed to be required by the accompanying Tlingit word. A large fish called tān, eel (łūt!), robin (cuq!), dead brush (tcāc), flounder (dzA'ntî), porpoise (tcītc), sea-lion head (tan cā'yî), sea lion (tan), salmon eye (xāt wa'ǵê), dog (kēL), mosquito (tā'q!a, literally "biter"), red paint (łēq!), sea-lion bladder (tan yū'wu), red devilfish (łēq! nāq), silver salmon (ǵāt), halibut (tcāL), beaver (s!AǵE'dî), a sacred plant, probably blue hellebore (s!îkc), red snapper (łēq!), a deep dish (k!AkAnê'), eulachon (sāk), earring (guk kAdjā'c), hide snare for catching bears (da's!A), osprey (cayā'ł), red-flicker feather (kūn t!a'wu), Bear people (x̣ūts! qowu'), grizzly bear (x̣ūts!), red flicker (kūn), star (qotxA'nAxa), spring (tākuī'tî), the king salmon after ascending into fresh water and turning red (q!āk), blue jay (q!ēcq!ᵘ), intestine of sea lion (tan na'si), male grouse (nukt), salmon trap (cāł), deer (qowakā'n), hawk (kîdjū'k), spruce-gum sticks for kindling fire (tēł), a large dog (sawā'k), mountain sheep (tawe'), squirrel berry (tînx̣), hemlock (yên), land otter (kū'cta), shark (tūs!), a berry of blue color (kAnAt!a'), burnt trees after forest fires (kugA'ntî), sun (gAgā'n), rain (sī'wu), [chief that wears] a dance hat (cAndakū'q! [s!a'tî]), mallard (kîndAtcūnē't), club (k!us!), grouse devilfish (kāq! nāq), humpback salmon (tcās!), [man] sitting in it (Atū'tAa, perhaps the name of an arrow), elderberry (yēL!), moon (dîs), fire (q!ān), deer devilfish (qowakā'n nāq), devilfish (nāq).

A second set, obtained by Lieutenant Emmons at Kake, contains the following names: A large dog (sawā'k), sea-pigeon's neck or a savage bear (sakī'ł), black bear (s!īk), raven (yēł), red snapper (łēq!), grizzly bear (x̣ūts!), burnt stick (kAǵā'n-ta, or possibly a sea bird called kē'gAn), stone ax (tayī's), robin (cūq!, a nāq), raven (yēł), island (q!āt!), crab (s!a-u), hawk (kîdjū'k), crow (ts!Ax̣wē'ł), a Tlingit (łīngî't), the constellation of the Great Dipper (YAxtê'), woman (cāwA't), red-winged flicker (kūn), salmon (xāt), and petrel (gAnū'k).

Another game was played with two principal sticks called nahē'n and naǵa'n—from the former of which the game derived its name—and a large number of common sticks used as counters. The first two are oval and just short enough to be concealed in the hand. Naga'n is carved and nahē'n is entirely plain. Participants in this game seat themselves in two parties, but only one person on each side handles the sticks. He who does so passes them rapidly back and forth in his hands, behind his back, until the leader on the opposite side says, "Hands out (dA'kdê djīn)," when he has to stretch his hands out straight in front, inclosing the sticks. When his opponent has fixed upon that one in which he thinks naǵa'n is held, he says, "This one (he'do),"

and if right his side gets one of the counters; otherwise they lose one. The side that gets all of its opponent's counters first wins and takes all that its opponents have put up. Sometimes a man would wager a $50 canoe, value the games at $10 each and make his opponents win five times before getting it.

The game with the knee-shaped die was played by the Tlingit as well as by the Haida.[a] They called the die klîtclu' ("buttocks-shape"), because the curving side resembles the curve of the buttocks.

A game much like shinny was played on the flats at low tide. The ball was started in the center, and two opposing bands of players tried to drive it across a line at their opponents' end of the beach.

They also shot arrows at a stake or at an arrow in the branches of a tree (see Memoirs of American Museum of Natural History, VIII, 61).

Q!uxiyiyā'gu ("hitting-the-wild-celery-head"). Just before "wild celery" of a certain kind goes to seed its head is cut off, placed on the ground, and surrounded by short pieces of the plant. Then boys form sides and try to spear the wild celery head with short sticks. If one succeeds his side wins, and if he hits a piece of celery he takes it over, but if he misses he loses his arrow. The celery head is called the "porpoise," from its supposed resemblance to that animal.

Q!ē'da. Four rolls of wild grass about 3 inches in diameter but of differing lengths are twisted, and four corresponding ditches are made in the ground to stop them. Then boys form sides, and, while one starts the grass rolls forward, the opponents, standing some distance back from the latter, try to spear them with short sticks before they reach the trenches. The other side rolls in a similar manner, and then they see which has made the more hits. The side which has come out ahead receives as many sticks from its opponents as it has made hits; the game is 20 points. This and the preceding game were both used for gambling.

Squirrel game. A pole is set up and a stick fastened at the top of it at right angles, so that the two have the shape of an inverted L. At the outer end of the second stick a figure is fastened supposed to represent the squirrel, and the boys shoot at this by sides with sharp arrows. Generally boys of the Raven clan play against the Wolves.

Children used to amuse themselves also by catching humming birds on gummed blankets and by enticing bats to a torch waved back and forth, where they were knocked down. Birds were shot with both sharp and blunt-pointed arrows.

MEDICINES AND CHARMS

As usual among Indians, the potency of medicines depended rather on supernatural than on medicinal properties, and their functions were fully as much to obtain positive advantages as to counteract

[a] See Twenty-fourth Report of the Bureau of American Ethnology, 189–190.

sickness. That certain medicines and certain methods of treatment were of medicinal value is not doubted and perhaps the snuffing of a little s!îkc (species of veratrum) into the nostrils to stop a cold is a case in point. Sea water and various green herbs were also used for the sick. In most medicines, however, the symbolic and supernatural play a much greater part than the empirical. The following list of medicines, along with their uses, was given me by an old man in Sitka:

Land-otter medicine (kū'cta nāk^{u}) was taken when one was "short-winded in one place."

Smelling medicine (łtcA'nî nāk^{u}) grows on the tops of mountains and is named from its strong odor. It is rubbed on the body for any kind of sickness or blown upon the traps to make them successful.

Medicine-that-makes-one-win (djiyA'naẋAc nāk^{u}) is a plant used to make one successful and also angry. When a person's friend has been killed, and one has not succeeded in getting revenge, he can do so by wrapping up a bundle of this with a little image of the person he desires to slay. Anything that has an image of itself so wrapped up will be destroyed.

Medicine-that-tells-anything-that-happens-in-the-town (ā'nto-xox nāk^{u}) is made out of flowers found in the woods and will inform one of just what is going on.

Loving-each-other medicine (wuctsîxA'nî nāk^{u}), when properly used, will make a woman suffer for love of the man she has rejected and cause her to walk after him, crying. To the plant one adds bubbles that come up at the edge of the rising tide, so that the girl's sorrow will rise with the rising of the tide, and also earth from her footprints, so that wherever the man walks she will follow him. The Crying-for medicine, of which the writer was told at Wrangell, is of the same kind, but unlike this it could be used only by the Raven people.

As its name implies, Flower-hunting-for-a-rich-man (ānqā'wo gā'-kocî) makes a person wealthy. It is said to grow about 4 feet high and bears its seeds at the top.

Medicine-that-makes-things-humble (łqā'tuł tcīn nāk^{u}) is taken to make animals and men humble themselves before the owner of it. The roots alone are used. To make this medicine efficacious the possessor spits some of it out in front of himself as he goes along.

Dzî'nẋî medicine (dzî'nẋî nāk^{u}—dzî'nẋî being probably the name of a flower) grows only over the place where a ground hog lives. It is put inside of the cheek and chewed so that one may obtain power to kill animals.

Seal's-tongue medicine (tsa-L!ū'te nāk^{u}) is a large flower which is chopped up and put on big boils or sores to heal them.

Medicine-from-fallen-trees (ās L!îq! nāk^{u}) will infallibly kill any man or woman on whom it is fastened.

There are certain berries called CAXWA'S!î growing in strings. When one heats some of the vines that bear these, breaks them, and places the broken ends close to a white spot in the eye—cataract (?)—the latter will come out.

Syphilis medicine (cā'xnASTî nāk^{u}) is, of course, used for the disease for which it is named. Before taking it the patient has to drink some of his own urine.

Entertainment medicine (SAgū'yayî nāk^{u}) is taken when one is going to be caught up as a "deer" in peace making and is expected to help him when he makes sport for the people he is among. (See p. 451.)

Happy medicine (kātū'k!A nāk^{u}) is used to make one feel joyful. A piece of wood cut from an old tree on which is an eagle's nest is added.

Medicine-always-looking-at-the-sun (gAgā'n łatī'n nāk^{u}) is used in the capture of sea otters. It is so called because it is a flower which turns to the sun at its rising and follows it all the way round. After anointing himself with this sea-otter medicine one must not bathe until after the sealing is over or he would wash the medicine off. While he is out his wife and children have to lie still on their backs at home, and his wife also puts rocks about herself, to keep the sea otter (or fur seal) quiet in one place until the hunter can get to it and shoot it.

The following is an account of the use of another medicine for killing sea otters:

When a man was going to hunt sea otter he fasted and kept away from his wife for a month. He kept his chamber box behind the door, always urinated into it, and let no one else touch it. At the end of the month he started out after an eagle, and having killed one cut off the foot and tied a flower called grabbing medicine (djī'yANAXAC nāk^{u}) to it. Then he made a miniature canoe with figures of himself and perhaps others inside, and he represented himself in the act of aiming at a sea otter. He made the eagle's talon clasp the seat so that he would have a sure aim and secure the animal. When at length he went out and was beginning to approach the sea otter he blew some of his urine toward it. This would confuse it so that it would swim in his direction. Sometimes he tied a piece of wood to the eagle's talon so that the sea otter would stand right up in the water like a buoy and be easily shot. He also made the eagle's talon grasp the seat beside him so that he would be sure to get it. If one did not remain away from his wife his arm would shake and spoil the aim.

In order to shoot a doe the hunter took hairs from the genital region of a doe already killed and fastened them to some of the grabbing medicine and both to the barrel of his gun. When he approached deer waving this, a doe would always come toward him. A stone called danā'k found in the deer itself also gave one good luck in hunting it.

To stop one from spitting blood, slugs were dissolved in water to form a slime, which was given to the patient to drink.

The wealth-bringing medicine above referred to was only one of many things that were supposed to bring riches. If a person who was destined to become wealthy were chopping firewood he might discover eight eggs looking like the largest dog-salmon eggs and very soft. These were called "firewood eggs" (gʀn kahā'gu). He had to take these down to his house immediately and leave them outside just over the door. After that he must enter, wash his head, hands, and feet in urine, fast, and abstain from women for some time. Otherwise, as happened to the father of my interpreter, the eggs would go away.

Katlian, one of the chiefs at Sitka, has a small wooden box wound with cord and the hair of slaves and pierced with eight small holes. There are now nails in the corners, but these are said to have been put in after the Russians came, the box itself being much older. This is called danā'k"dākī't and contains things that were supposed to bring wealth. Just what these are was not learned. Originally some of the sun's manure was among them, but its first owner did not act right, and it disappeared. If the gonaqʀdē't were seen to come up in the ocean before such a box was made the foam it raised was put in.

Before a man could open this box he had to remain away from a woman for four months. At the end of that period he fasted for seven days and very early each morning he had to strip, wade out into the sea until he was beyond his depth, being sure to return before the raven cried. If the raven did cry before he was through that minute he was certain to die. On each of the seven days of his fast the man blew through one of the small holes and then sucked out. The eighth was for the day on which he ate. Just at daybreak on that day he took out all of his property in skins, etc., and spread the charms in his box over them. There must be two boxes of grease near the fire, some of which was put into the fire at that time and some over the person's own hair. This was to feed the articles in the box. As he was putting grease into the fire he made a motion toward the charms, put his hands up to his face, and blew out. And while his hands were up to his mouth he said, "Let me be wealthy. Let me have five slaves," etc. Then he put the articles back, along with bits of beaver skin, marten skin, etc., and put the box away, and when it was broad daylight he took what was left of the grease to other houses.

In olden times this box caused people to become wealthier continually, and was handed down by a man to his nephew, who then had to do exactly like his uncle. If one did not use the medicine right the charms disappeared from inside, and he became poorer than before.

WAR

Rivalries between opposing parties of dancers at a potlatch often resulted in serious conflicts, but the host's people could generally stop them by rushing between, bearing their emblem, or by making the call of the animal—raven, wolf (or eagle)—for which their phratry was named.

If a man were killed and the murderer escaped into his own house, the people of the murdered man held a council, and if they thought that he was not of high enough caste to make up for the dead person they went out and called the name of one belonging to the same clan who answered the requirements. This person then had to put on his best clothing and run out to be killed, though before this happened he tried to stab one of his would-be slayers. After that the actual murderer was punished by his friends by being compelled to pay a great deal of property. Unless an equal number of persons of the same rank had been killed on both sides a money compensation to the losers, or their extermination, was the only way in which a certain peace could be brought about, and this law held for any number of years after a person had been slain. It was in no way uncommon for such compensation to be demanded a long time after all actual hostility had ceased. To start away for the purpose of obtaining it was called qā'djit ū'wagut.

Revenge for the death of some one for whom no payment had been made and desire to obtain slaves in order to increase the power of the chief and his clan were the commonest incentives to war. When this was fully determined upon, all went out in a body and cut supports for the canoes of the warriors. These were two crossed sticks set under each end of every canoe, and crossed lines intended to resemble these were painted on each warrior's face "so that he might die with them." The paddles of the warriors were also tied up, and the warriors were not allowed to see or go to any woman. This tabu depended upon the length of time they expected to be gone. "Sometimes they did not see a woman for a year." They would also feign that certain sticks were enemies, make images of them, kill them, and tie them up as captives. All the men and their wives had such images.

At the end of four days they took the canoes from their supports, and, if there were a person in their town belonging to the clan they were going against, they would kill him and use his body as a skid on which to drag the canoes down. During those four days the war leader and the shaman fasted. After they had launched their canoes their wives brought down the wooden images they had tied up with strings and gave them to their husbands, who tossed their own images back in return. If any woman failed to catch the image tossed back her husband would die.

While the warriors were away the war leader's wife had to have stones tied about her blanket just as did her husband on the expedition, and she also dressed the image like him. She had a long board which she called a canoe, and all of the wives of the warriors pretended to sit inside of this like their husbands. All ate out of one dish and took care that it did not turn over. If that happened they thought their husbands' canoes would do the same.

Meanwhile the warriors themselves fasted and drank no water for four days, and it is also said that during the expedition a warrior was allowed to eat only one kind of food. The first water they drank on the journey they called cāt!k!. Besides their ordinary use, shamans' hats were worn by warriors. As they went along the warriors took everything away from those they met, both friends and foes. The bow man fasted differently from the others, and whenever they landed he acted as scout and sentinel. When they came to camp, he usually went ahead and looked about, and they did not sleep until he had done this. The war leader, during war time, no matter where he was, always drank from a small basket-work cup hung about his neck.

The shaman, who always accompanied each war party, kept up his fast after the rest had begun to eat, and all of his spirits watched until at last he said, "We shall see a canoe to-day," or "We shall kill some one to-day." After that he began to eat. When he saw a canoe by means of his spirit helpers, he said, "There comes a piece of torn cedar bark," and all of the warriors used the same words toward it. They said this so that all of the people they wanted to kill would be as soft as bark when they came before them. The shaman would also say, "When the sun gets over here some one will be killed."

When they came in sight of a canoe they gave chase. Then the husband of the woman who had missed catching the little image made out of sticks was killed first. When anyone was killed they stood his paddle up in his place. After they had obtained many heads they turned back, and when they got near home they scalped these, unless they had had time to do so on the spot, and dried the scalps by the fire. The scalps were cut off so as to take in the ears.

As they paddled home the warriors sang songs of victory, and when they came round the point next to the village all of the warriors' wives ran out to look at them. When they got close in each watched for the place in the canoe which her husband had occupied, and if a paddle were stuck up there she felt sorrowful; but if not, all of the scalps swinging around over the canoe with the wind made her feel very happy.[a] "Probably the dead enemy feels happy, too," said the writer's informant, "because they have saved his scalp." When they

[a] If a scalp swung at right angles to the canoe the scalp was thought to be happy; if parallel to it, unhappy.

came ashore the scalps were hung out in the wind from the ends of the house stringers toward the sea.

No regular smoke signals were used in war, but if a man's friends had been killed and he was near the town he would light a fire with his flint to let the people know that something was wrong. When an enemy was expected fires were put out very quickly after eating, so as not to attract attention.

When peace was decided upon, one party visited the other, usually bringing their crest with them. Then they danced opposite each other, and a prominent chief, who received the title of "deer" (qowakā'n),[a] was selected from either side and carried off by the opposites, for whom he danced and whom he entertained in various ways.[b] He was very careful in choosing the words he used, so that no hostile meaning could be gathered from them in any way. Katlian, at Sitka, has a small piece of jade hung at the end of a hide string, with which the "deer" used to scratch himself. If he used his fingers it was thought that he would die. The man who brought in the "deer" sang a grizzly-bear song, so that the deer would not be troubled. He likened the "deer" to the bear's head, which is always treated with great respect after the animal has been killed. (See p. 455.)

COSMOLOGY

As usual among primitive people, the earth was conceived of as flat and the sky as a solid vault. Inside of and between these everything was alive with spirits called yēk, and some also resided upon the sky itself.[c] The stars were towns or houses, and the light the reflection of

[a] It is said that a bear once met a deer in the woods and expected it to fight him, but it did not. That is why the person who is taken up when peace is being concluded is called the "deer."

[b] While he acted in this capacity his wife was not allowed to look at him, and certain men watched over him, took care of his toilet sticks, etc. He carried the tail feathers of eagles in each hand and wore eagle's down and quills in his hair.

[c] This statement is in accordance with the idea first derived by a person of European lineage, but if one were to delve deeper into Indian philosophy it would probably be found to give a somewhat erroneous impression. Most Indian languages, at any rate the Tlingit, do not have a true plural, but usually a distributive and occasionally a collective. This means that instead of thinking of so many different objects they think of one diffused into many. Therefore the Tlingit do not divide the universe arbitrarily into so many different quarters ruled by so many supernatural beings. On the contrary, supernatural power impresses them as a vast immensity, one in kind and impersonal, inscrutable as to its nature, but whenever manifesting itself to men taking a personal, and it might be said a human personal, form in whatever object it displays itself. Thus the sky spirit is the ocean of supernatural energy as it manifests itself in the sky, the sea spirit as it manifests itself in the sea, the bear spirit as it manifests itself in the bear, the rock spirit as it manifests itself in the rock, etc. It is not meant that the Tlingit consciously reasons this out thus, or formulates a unity in the supernatural, but such appears to be his unexpressed feeling. For this reason there is but one name for this spiritual power, yēk, a name which is affixed to any specific personal manifestation of it, and it is to this perception or feeling reduced to personality that the "Great Spirit" idea seems usually to have affixed itself. It is true that, as among some other tribes, one of the personal manifestations of this supernatural energy, Nas-cAki-yēl, has so far asserted or maintained an ascendency over the rest as to exercise a certain control over them, but such authority is far from complete. It finds its expression also in the heaven god of the Haida and Tsimshian.

This supernatural energy must be carefully differentiated from natural energy and never confused with it. It is true that the former is supposed to bring about results similar to the latter, but in the mind of the Tlingit the conceived difference between these two is as great as with us. A rock rolling

the sea. The sun and the moon were also the abodes of spirits. The rainbow was thought to be a road by which the souls of the dead passed to the upper world, while the northern lights were spirits of the dead playing about, and shooting stars were embers thrown down from their fires. The milky way was named "Łq!ayā'k!'s tracks" (Łq!ayā'k! q!ō'siyite), because the Tlingit hero Łq!ayā'k! had made it in journeying across the sky.

The earth was in a measure conceived of as a live thing, and a "great liver of the world" is spoken of. Under everything lay Old-woman-underneath (Hayicā'nak!ᵘ), who had charge of a post made from a beaver's foreleg, on which the world rested. When Raven tried to drive her away from this post the earth quaked. According to another story she was attending to a big pot over a fire, and when she was cross with those about her or they used words which displeased her the cover of the pot shook and the earth moved. Or, again, the earth shook when she was hungry and stopped when people put grease into the fire, which immediately went to her.

The number of spirits with which this world was peopled was simply limitless. According to Katishan, there were one principal and several subordinate spirits in everything, and this idea seems to be reflected in shamans' masks, each of which represents one main spirit and usually contains effigies of several subsidiary spirits as well. There is said to have been a spirit in every trail on which one traveled, and one around every fire; one was connected with everything one did. So in olden times people were afraid of employing trifling words because they thought that everything was full of eyes looking at them and ears listening to what they said. As among the Haida, the belief prevailed that supernatural beings went hunting or on expeditions at night and had to get ashore before the raven called; if not they would die instantly. Most of the following items about these "yēks" were told by an old man at Sitka (Dekinā'k!ᵘ).

People reverenced the sun and moon very much, because when these hide their faces, as in an eclipse, it is dark and one can not see. When a man was traveling along out at sea and the sun had just begun to rise above the horizon, he "grasped the shadow of the sun" and blew on his hands, saying, "Let me have luck." Toward morning a fisherman also went out on the ocean, grasped the shadow of the sun and put it around his float, saying, "Now is your luck. Bring me luck. The sun is just coming up with it." If a mock sun, of which there

down hill or an animal running is by no means a manifestation of supernatural energy, although if something peculiar be associated with these actions, something outside of the Indian's usual experience of such phenomena, they may be thought of as such. Although the Indian has, in this latter case, reasoned to an erroneous cause, the difference in his mental attitude is none the less great. The one action he conceives of as natural, the product of purely physical forces; the other as a manifestation of supernatural energy, although in a manner superficially resembling that in which a physical phenomenon presents itself.

are sometimes said to be four, goes down with the sun good weather is portended; if it goes away before sunset, bad weather.

People did not dare to talk to the moon roughly, because two girls who once did so were carried off by it. They were going after water when one of them said, "That moon looks just like my grandmother's labret." Immediately both went up into the moon, and the one who had spoken was smashed to pieces in it. The other you can still see standing there holding her bucket. Afterwards the people always gave feasts for these girls in the moon. When it was darkened at the time of an eclipse, they always blew out toward it to blow away sickness. They thought it would be taken away just as the girls were taken. The stars have already been referred to. In the sky were certain spirits called Fair-girls-of-the-sky (gūs! tukoha'nî).

It was thought that there was some being in the wind, so people always talked to it kindly to induce it to moderate, and offered it a piece of fish. The wolverine (nūsk) was said to have control over the north wind, and when a story is told about one the north wind will blow. The same thing was said when one told a story about the Athapascans, because they live toward the north, and about the wolf. Winds from the north and east blow very persistently out of Silver bay, but when people once complained because Silver Bay blew so much, he said, "It is not I, but my children," meaning the smaller inlets.

People asked the sea for all kinds of things, but especially for sea otter. They thought that it brought great luck. Shamans talked to it also. When a big ocean swell came along, one put some black stuff like charcoal called "black raven" (yēł tū'tc!î) upon it, saying, "I have put this on you. Please cease." They addressed it as a female and asked it to help them by spreading out its legs.

The first big mountain at Cape Edwards is called Xās, and when a person went by it he always said, "Spread out your legs (so that it will not be rough). Do not harm me." There was another high rock to which people always talked as they passed. From Sitka around to Huna there were various places to be spoken to.

When a person bathed in the hot spring, he had to talk to it and he put bits of copper into it to take away his sickness.

There were spirits in the lakes and swamps, and if a man urinated in these places he became weak. He urinated in bed and all the time, and suffered a great deal when he tried to cohabit. The only way to avoid this was to cut a dog open and throw it into the swamp.

At the head of every creek was an old woman whom the salmon tried to reach. The small sized ones wore out their noses trying to get up to her. In the Auk country is a creek to which one had to use good words. Otherwise, if he fell down near the stream, it would cut his hands to pieces, although the rocks are not sharp ordinarily.

They always talked to a glacier, saying, "My son's daughter, be very careful. You might come down on me." Glacier spirits called Fair-girls-of-the-glacier (sīt! tu koha'nî) came to shamans.

When a tree was being cut down, one said to it, "Black bear skins have been laid in the place where you are going to fall. Fall down on them;" though they had not actually placed anything there.

The thunder bird causes thunder by flapping its wings or by moving even a single quill. When it winks, lightning flashes. Upon its back is a large lake, which accounts for the great quantity of rain falling during a thundershower. When a thunderstorm comes upon ripening berries, too much rain falls to let them grow as they should. The thunder bird keeps on thundering and the sky continues cloudy until the bird catches a whale. Then it carries the whale up into the mountains, where bones of whales caught in this manner may often be seen.

A hunter from Daxē't was once overtaken oy a tnunderstorm and was blinded by a great flash. When he finally looked up he saw a big thunder bird astride of a mountain. It had the general appearance of an eagle. Another time some Sitka people out in a choppy place in the ocean heard thundering going on in a certain direction and, repairing to that point next day, found a whale lodged in the trees with claw marks on it. A Russian vessel was almost carried away by one of these birds because the sailors had made fun of it. A certain man was hunting on the mountain Xās. When he reached the top, he saw a dark cloud and heard some one talking to him very plainly in the Chinook jargon. This was a thunder bird and he became very rich from having heard it, and this is why people believe it exists. People also become rich if they merely catch sight of it.

According to Katishan, Nās-cA'kî-yēł (Raven-at-the-head-of-Nass) was the supreme deity and the real object of worship of his people, but the owner of the famous Seattle totem pole informs us, through George Hunt,[a] that he was merely the king of birds, and from that circumstance superior to Raven. Possibly there was some notion of a supreme deity among the Tlingit similar to Haida and Tsimshian beliefs regarding Sîns-sgā'nagwai and Laxha', but this is all the information the writer possesses regarding it. As represented at the foot of the Seattle pole, Nās-cA'kî-yēł is certainly of avian character.

Raven was the creator, or rather organizer, of the present state of things, both in the natural and in the artificial world. "After he was through with his travels he stopped somewhere," perhaps in Yēł qiwaqā'wo (see p. 461). When a raven was flying about, people of either side talked to it.

When people were out halibut fishing and saw a cormorant flying about they said, "Squeeze your buttocks this way." Then, after it had shaken itself and defecated, they said, "It has done so now," and

[a] Personal communication to Prof. Franz Boas.

they expected luck. A man out fishing once said so much to the cormorant that it burst into pieces. Some time afterwards the fire crackled loudly and, when this man went through the motion of seizing and swallowing the fire, it killed him. That is why in those times people were very careful what they did.

As elsewhere in North America, eagle feathers had sacred associations. They were used at feasts in the form of ornaments and the dancers' headdresses were covered with eagle down, which flew about inside of the house and covered everyone. Eagle down and red paint were much used by shamans and are spoken of in the stories as principal media in restoring the dead to life. At the same time there appears to have been no special veneration paid to the eagle, as such, except by certain families, like the NēxA'dî, which made a specialty of the eagle emblem.

The mallards (kîndAtcunē't, i. e., "Flying-up birds") formerly flew up slowly, like the sea ducks, but a mallard once ran into a stick and tore itself open, since which time they have flown up straight. The bird djegenī'k or tslēgēnî' does not like the milt of a male salmon, and therefore does not come down to the beaches until the salmon season is over.

When a dead grizzly bear was brought into camp its head was carried indoors and eagle down and red paint were put on it. Then one talked to it as if to a human being, saying, "I am your friend. I am poor and come to you." Before the entrails were burned he talked to them, saying, "I am poor. That is why I am hunting you." When one came to a bear trail he said, "My father's brother-in-law, have pity on me. Let me be in luck" (Xāt gā ḷaxē'L). The term of relationship was probably changed when one of the Raven phratry spoke. These words were not employed because they thought that the bear would come to life again, but because the dead bear's friends might kill the hunter if he did not use good words toward it.

If a bear killed one's brother he tried to get its head and keep it. Then it would be taken out at feasts and exhibited. When a woman met a grizzly bear she took out her large labret and blew toward the bear through the hole in her lip. Then the bear would not touch her. If one made fun of a grizzly bear it might attack him.

The origin of the bear emblem is always referred to the hero Kātsl, who married a female grizzly bear, though to which Wolf clan he belonged is entirely uncertain, the Te'qoedî and Kā'gwAntān both claiming him.

That the wolf was also supposed to possess great power is evidenced by his use as a totem by one of the two great phratries and as an emblem of many of the clans.

The wolverine (nūsk) was also held in great respect. Because he can take an iron trap apart and eat what is in it, there was a saying,

"as smart as wolverine." At the same time, he was so annoying that the christianized Indians reckon him next to the devil for badness. Originally he is said to have been an Indian.

Although apparently so harmless, the land otter was dreaded more than any other creature. This was on account of his supposed supernatural powers, fondness for stealing people away, depriving them of their senses, and turning them into land-otter men (kū'cta-qa). As they lived at various points along shore, these land-otter men were called q!ā'tu-qa ("men-inside-of-points"). Naturally enough the land otters were closely associated with shamanism, which, in fact, is said to have come from them through a man named KAka'. Years ago the Tlingit would not use their fur.

When a person was in danger of drowning, canoes would come to him (or her) and the people in them would say, "I am your friend," and take the person home. After that he became like them, but was called a land-otter man. One woman thus captured saw a number of round objects by the fire which she was told not to touch, but she jumped on one and it burst. They were the land-otters' scent bags. Then she was thrown outside and became a woman once more. In such a case a person had to come to human beings again or other land otters would take him. CAk^{u} are bad-smelling things on the beaches always eaten by the land-otter men. They caused a person upon whom the land-otter man breathed to faint, but if one put native tobacco, iron, or lead into his mouth it counteracted the influence. To restore a land-otter man to his senses live coals were thrown upon him, and after he had fainted slits were made with a knife on the palms of his hands and the soles of his feet, into which urine was rubbed.

My interpreter's father and two other Indians once heard something whistling behind them. When the creature that made the noise got near it climbed into a tree by the fire and began throwing cones upon them. They invited it to talk and to come down and eat, when in a strange, unnatural voice it announced the death of a Klukwan shaman. When they set out a dish of fish for it, it appeared on the other side of the fire and approached it slowly. Its breath smelt strongly of cAk^{u}, so they put tobacco and bullets into their mouths. Its mouth was open, enabling them to see its large, savage-looking teeth. Then they said to one another, "Let us throw coals upon it," but the instant a motion was made it disappeared. It kept whistling around and throwing down cones all night. After they had started off in their canoe for Yêndê'staq!ê they met another canoe coming from Klukwan and learned that the shaman the land-otter man had spoken of was dead.

A land-otter man once hung about a spring and made several people who came there faint, after which it stripped them naked and left them in ridiculous attitudes. When one young man went after water the land-otter man kept throwing cones into his bucket. In the morn-

ing it came to him by canoe in the shape of a small man and wrestled with him. The land-otter man threw the youth down twice, but he also threw the land-otter man once. At last it left.

As among the Haida, belief in these beings is deeply rooted, and persons are easily deceived by practical jokers who imitate the sounds and actions attributed to land-otter men.

To obtain good luck people used sometimes to carve round sticks into the shape of land otters and place them in the cave where a shaman's body had been laid, saying to them, "Keep me in good health. Help me wherever I go."

The frog was talked to, and if anyone went by a point between Sitka and a camping place called Daxē't where one of these animals had turned into a rock, he asked it to help him. The slime exuding from a frog's skin was thought to be very poisonous and fatal to smaller creatures.

Sea lions were hunted, but they were much respected on account of their size and strength and in several stories appear as powerful helpers. The largest sea lions were called by a special name, qlātlʌcukā'wu ("biggest-animal-sitting-on-the-edge-of-an-island").

The seal was not an object of much reverence, but a man of the Tsague'dî family is said to have been once captured by seals, and afterwards to have related various things about them. He said that the seals are very much afraid of killer whales, and when the latter approach the whole ocean seems to squeak "like dry boards." Their terror of killer whales is due to the fact that the whales destroy everything when they kill seals, whereas men save their stomachs, and it is in the seal's stomach that his soul resides. After the stomach of a seal is blown out to dry the seal spirit comes out and the seal is born again. From this man, according to Katishan, the Tsague'dî claim the seal, but, strangely enough, a man belonging to that family was entirely ignorant of the story. The story itself is doubtless genuinely Tlingit, whether it is properly attributed to this clan or not.

The writer was told at Sitka that anciently people used to talk to a piece of bone that comes out of a seal's shoulder blade, saying, "Will you tell me what I am going to kill? Am I going to kill a seal or a bear?" Then the speaker spit upon it and threw it up into the air. If it remained in a certain position after it fell the man would kill something; otherwise he might as well stay at home.

The killer whale was regarded highly, but reverence for it did not amount to a killer-whale cult, as might almost be said of the Haida. When a killer whale was passing people threw their children into the wash raised by it and said, "I want to be very strong and healthy. Give me things."

The killer whales are said always to have paid attention to human beings because they were never hunted, and they were never hunted

because the first killer whale was made by a man out of a piece of yellow cedar. This is thought to explain why a piece of killer-whale fat thrown into the fire crackles just like a piece of yellow cedar.[a] If one should shoot a killer whale the others would come after him in crowds. Once a certain man did bring killers after him in this way and placated them only by a gift of tobacco. It is curious that łAgū'ckłî, the term for a killer whale's dorsal fin, has been adopted by the Haida as the name for a particular killer whale of supernatural consequence. (See Memoirs of American Museum of Natural History, VIII, 201.)

There are supposed to be three varieties of killers. Kīt yīyagu' is the largest; it has a hole in its dorsal fin. Kīt wu ("white killer whale") is almost all white. Kīt cāq! ("red killer whale") is the smallest but most warlike and always goes in advance. It is also called kīt wusā'nî ("killer-whale spear").

There are also three varieties of porpoises. The smallest, called tcītc, is entirely black; the largest, łgîłwu', has the dorsal fin and whole belly white; while the q!ān is a dark-red porpoise.

People used to talk to the large ground shark, and a member of the Wolf phratry addressed it as "My son's daughter," because it belonged to that phratry, and a Wolf's son was the only person who could marry a girl who wore the shark. He would say to it, "You must look out for me, so that I shall not be harmed when I am traveling."

The skate was the canoe of the land otter, and also the slave of the gonaqADē't.

Salmon are the subject of a special story told along nearly the whole extent of the north Pacific coast, but seeming to have originated among the Tlingit. Haida versions of this are given in Memoirs of the American Museum of Natural History, VIII, 243–245, and Bulletin 29 of the Bureau of American Ethnology, 7–14. There used to be a curious belief that king salmon, after they had passed into the creeks, turned into steelheads.

To what has already been said regarding fishing customs may be added the following: The Tlingit always talked to their halibut lines, halibut hooks, and buoys, addressing them as "brother-in-law," "father-in-law," etc. If one did not do so, these would become ashamed and refuse to let the fish bite. While baiting the hook a person spit upon it and said, "Go right to the fireplace (gān kANA'x tcî'gîdagu q!WAn). Hit the rich man's daughter" Then the hook did not become ashamed.

Floats and hooks were carved into the shapes of various animals, and hooks with raven and land-otter carvings were thought to be most successful—raven because Raven made the world, and the land otter because that animal takes people away and sees things under the ocean.

When a person had let his lines down into the sea in front of a camp

[a] The crackling of yellow cedar has become a proverb. So, when a person uses his tongue too freely, people say, "You talk too much, just like yellow cedar."

where there was a large fire and he heard the fire crackle he said, "Out to the end of my hook" (axtî'q!î cū'dî). This was in order that the spirit in the fire might help him. If, after he had sat still for a while, the corner of his mouth twitched, he said, "I am in luck," for he knew that he had caught something, and when he went out to his line there was sure to be a large halibut on the end of it. With the Tlingit the right side is always the lucky one, and, if a person's mouth twitches toward anyone on that side, it means that that person will bring him good luck. Twitching to the left indicates bad luck.

Food products collected at low tide, especially mussels and clams, were talked to, so that they would not bring sickness upon those eating them. If a person took tobacco just after eating mussels he would be poisoned and was sure to die unless small cuts were made on top of his head and urine poured into them. While digging for clams that draw down out of sight rapidly they said, "Do not go down so fast or you will hit your mother-in-law in the face." The abalone was very highly esteemed as an article of adornment, but the writer does not know whether it was personified or addressed. The first of all abalones, a very large one, is said to have been pulled up from under the sea by a poor fisherman.

To a large fly that "makes worms in salmon" they say, when cutting the fish, "Do not harm us. Do not let the worms get in. Do not poison us."

The little water beetle (ts!î'nq!ê) that moves about upon the surface of fresh water was said to carry away anyone who urinated upon the water where it dwells. Small bone figures of this beetle were passed over sore places by shamans, to heal them.

In olden times people talked to anything that was carved like or in any way resembled a human being. If they saw such an object when they were traveling about, they spoke to it. If a man dreamed that the carving on his house post started a certain song, immediately on awaking he started that song himself. If the owner of a house dreamed that a dead man started a song to his carved post, the house owner began singing it next morning as soon as he awoke. The figure of anything seen by a person which subsequently gave him good luck was often painted on the front of a house. Such paintings, when placed near the corners, were called q!êngu'kc ("spread out on the corners").

After a man had hunted for some time in vain he would go ashore, make a fire, and put grease on the bow of his canoe so that the heat would cause it to soak into the wood. At the same time he talked to the canoe. Grease was burned into the canoe all around and whenever a crackling sound was heard he said, "That is for luck," because he knew that the place whence the sound came was where the seal he was about to get would lie. The hunter also took his spear down

and put it into the water, saying, "You will do great work to-day." Then he placed it by his side, knowing that he would get something.

The Tlingit, like the Haida, believed in spirits that brought wealth to him who saw or heard them and two such are identical in both mythologies. When one heard in the woods a sound like that made by a sucking child he must remove his clothing and pursue it. Then, if he were destined to become wealthy, he would finally overtake and catch a woman carrying a child on her back. She was fine looking and had curly hair, but her finger nails were long and sharp. She would scratch him with these nails and he must keep the scabs that came off when the scars she made were healing. If he gave a piece of one of these scabs to a friend, the latter, by washing or scraping his arm slightly with it, would become wealthy. This woman was known as Lê'nAxxī'dAq, and is evidently identical with the Skîl djā'adai (property woman) of the Haida.

TAxgwA's was a being who made canoes, and so corresponded to the Haida canoe maker WAtgadagā'ñ. One who was destined to become a good canoe maker heard him chopping very fast, woodpecker-like. Then the man had to throw off his coat and shirt and follow the sound, and he had to wash his face and head in the first lake he came to. My interpreter told me that his father once heard the noise TAxgwA's makes, and came upon a tree with fine chips all around the bottom, but he forgot to take off his coat and so missed seeing the being himself.

Mountain Dweller, CāqAnayî', is also said to bring good luck to one who hears him chopping and sees where he has been. Perhaps he is to be identified with TAxgwA's. The gonaqAdē't was more popular than any of these. It lived in the sea and could assume any shape.

A very strong spirit, called Kī'wax awuts!ē'x ("one-heard-coming"), travels along, raising his feet high and making a great noise.

Finally, we must mention the four brother transformers who appear so often in Tlingit mythology, especially the headstrong mischief-maker, Łkayā'k!, and KAck!A'LK!, the shaman.

FATE OF SOULS

The soul of a living person was called qātuwu' or wā'sa-tū'watî ("what feels"), "because when a person's feeling is gone he is dead," and the soul after death, yū'kgwAhē'yAk" (or kayūkgwahē'yak"), or else qayahāyî', "shadow," which is also the word for picture, while the ghost or spirit of the dead body was called s!A'gî. Rather inconsistently, as it would appear, the last word is that applied to the place where souls go after death, sA'gî qā'wu ā'nî ("ghosts' home"). This was an entirely happy region, elevated above the plane of this world, and, since some souls were said to go to the sun, moon, or stars, the towns or houses thought to be there must sometimes have been con-

ceived of as in that country. When a person was unhappy in this world his aunt or uncle would come to him and say, "You are unhappy here. Come to me." Then the person died and went to that happy country. There was a house there called Sleep house (tA hît), where people rested, and this seems to have been the name given by some Tlingit to the next higher region, otherwise known as kī'waA ("way up"), whither went those who died by violence. Access to this latter was had by means of a single hole called āndaqê'n wūł, reached by a ladder. It was guarded by a being in human shape named DjAqt!ā'îq!-qa, who sat by it and cried out "A man is coming up" when a person came up thither, while grizzly bears (āndaqê'n qaẋū'ts!î) watched the spirit road. If a man died unavenged he could not get up the ladder and drifted by on the wind with the clouds. Below the plane of earth was a third region for those who were drowned, and food sent to them had to be put into the sea. According to Katishan, a bad person after death went to Yēł qīwaqā'wo ("Raven's home"), where Raven lives. It was not learned whether this belief is due to white influence or not.

The Tlingit claim to have learned about all these regions from men who had died and come to life again. One such tale occurs in the Raven story, and the following are similar accounts obtained at Sitka:

"In olden days a certain person died and thought it was so hard to walk up into the ghosts' country that he came back. Then he said to the people, 'I haven't any moccasins. I haven't any gloves on. That is a very hard place to go up through, for there are lots of devil clubs and other kinds of bushes in the way. You must also sing songs when anybody dies. It is the same as a road for him and will lead him. There are wolves and bears along the way, which one has to protect himself against.' So the people gave him moccasins and gloves and put a knife in his hand so that he could defend himself. He also said that there were many houses there, and told them to dress him up, put red paint on his face, and eagle down on his hair. He had come to life only to explain how the dead should be treated, so after he had told them all those things he passed away again. Just before going he said, 'When the fire crackles at a certain time—for that is the only way they can talk to you in this world—it is because the spirits are hungry. You must then put grease, berries, and other kinds of food into the fire.' The first time he died the spirits asked, 'What did your people give you to eat when you started on your journey?' So, nowadays when anyone dies people always give feasts to feed the spirits. In the places which people reach after death there are many houses in rows, and the spirits assemble in those houses to share the food sent up from this world. All of the grave houses are named by the spirits, who give the same names to their houses in the ghost country.

"Whenever a person was about to die he said, 'This house is beginning to fill with spirits. They are waiting for me.' This is why people know there are spirits (kayūkgwahē'yak^{u}).

"After that a certain man tried to find out whether there were really any spirits (kayūkgwahē'yak^{u}). So he went out and shouted, 'I invite all of you ghost people (s!A'ge qā'wu) to a feast.' He wanted to see how they looked and to learn whether they could hear. By and by he went out a second time and shouted, 'This way, this way, all you spirits. I invite you all.' In the morning all the spirits he had invited came to the door of the house. He had already laid down mats for them, so he said, naming them from their appearance, 'All Mossy-eyes (WAqcAntus!ī'q!-qa) go to the rear of the house; all Dried-out-eyes (WA'qcAntuxū'k^{u}) in front.' He called them so because those that had been long dead had moss in their eyes, while those who had died recently still had dried eyes left. But the ghosts became angry at the words he used and said, 'Do people call us Mossy-eyes because they are going to destroy us? The people that call us Mossy-eyes are not going to beat us, are they?' Still the man kept on calling them by these terms, and when he dished up the first berries he said, 'Give this to chief Mossy-eyes.' Then he filled a second dish and said, 'Give this to chief Dried-out-eyes.' When the food was taken up, however, and Mossy-eyes's name called out, the latter said, 'Put it into the fire. We like it better that way.' Afterwards chief Mossy-eyes said, 'Let this man take home for me what is left in my dish.' This was not a respectful thing for a person to say to the giver of a feast, but he said it because the giver of this feast had not respected them.

"When the host reached Mossy-eyes's house, which was a grave house, with the dish, the house smelt moldy and was so dark that he wandered around to right and left without being able to see anything, and he was unable to find his way out. Then chief Mossy-eyes said, 'Take out pitch and light it so that he can see to get home.' So they tied pitch wood together, lighted it, and fastened it on his head, telling him to go down with it. Part way down, however, the pitch ran out over his eyes so that he could not see and had to be led into the house, but the ghosts told his friends not to help him because he had treated them so rudely.

"Whenever people had a big feast in this world and put trays of food into the fire, mentioning the names of the deceased, this food went directly up to the spirit houses. And when people gave blankets away to those about them it was just as though they gave blankets to spirits, for the spirits also received them.

"When a Wolf man at Sitka was about to give a feast the fire began crackling and he said angrily, 'Why don't you spirits work for food and blankets? You always want people to give them to you.' As soon as this man was through feasting he fell sick and not

two days afterwards he said, 'Numbers of spirits have come to welcome me.' Then he died. So his friends began to dress him up in his war clothes and they put a war spear into his hands. After a time, however, he came to life again and told the people what he had seen. He said that he had seen lots of people outside on the porches of the grave houses. One of these, a chief who had died long ago, spoke from his porch, saying, 'Do you think the spirits are getting starved that you talk to us in that way? We are not getting starved. Do you think that you are going to destroy all the spirits with that war spear?' And on account of the war spear they sent him back into the world. The man also said that that is 'an everlasting place' (i. e., a very large one), like a regular town, and added, 'Whenever any man is going to give a feast for one who has died they feel very happy over it there.' The man died and came to life again four times, after which the war spear was taken from him and he died for good."

"In a certain war a man was killed and went up to Kī'waA, and by and by a woman of his clan gave birth to a child. One time, when some one was talking about that war, the child cried persistently and they said to it, 'Keep quiet. What are you crying about? Why are you crying so much?' Then the infant spoke out saying, 'If you had done what I told you and let the tide go out first we could have destroyed all those people.' The child was the same man who had been killed. From him people knew that there was such a place and that people who died by violence went there. He told the people that when a murder was about to be committed all the people up there came down to look, and that they are the electric sparks (ges!ū'q, St Elmo's fire (?)) which light on houses. They were said to come down on the fireplace of a house where a murder was about to take place.[a]

"If a person with a cut or scar on his body died and was reborn the same mark could be seen on the infant."

SHAMANISM

Along with multiplicity in the number of spirits came a great development of shamanism. It would appear that, taking the people of the north Pacific coast as a whole, shamanism reached its climax among the Tlingit. At all events their shamans were more powerful and influential and more dreaded than those among the Haida. The latter appear to have recognized this and affected to bring many of their spirit helpers from the Tlingit country. But while the Haida shaman personated only one spirit at a time, and usually performed without a mask, each Tlingit shaman was guarded by a number of helpers and possessed a number of masks. Besides depicting a principal figure on each mask, there were usually one or more smaller ones which

[a] This story, or one like it, is repeated everywhere in the Tlingit country.

represented subsidiary spirits (yēk), and these were frequently supposed to strengthen special features or faculties of the shaman. Thus the figures of spirits round the eyes were to strengthen the sight and so enable the shaman to discover hostile spirits; those around the nose strengthened the smell; those around the jaws, the jaws, keeping them firm at all times, etc. Some of these small figures were animals, like land otters, but a favorite was the woodworm, because it can bore through wood and so typifies strong perception. A braided belt might also be used to indicate the woodworm, and this was supposed to go to an enemy's town and find out what was passing there. The shaman also let his hair grow and took no care of it. He usually wore a necklace of bones and had a little whetstone hung about his neck, which he employed as a head scratcher. Besides oval rattles, such as Haida shamans always employed, they sometimes used the large chiefs' rattles, with figures of a raven and other animals upon them. This may have been because Tlingit shamans were generally of higher social rank than those among the Haida. The chief's rattle came to them originally from the south. Besides the mask spirits there were also special spirits to strengthen the rattle. At the command of various spirits bones were worn through incisions in the septum of the nose, and on the head a peculiar hat, often adopted by common people, especially by warriors and by people at feasts. The shaman's body was usually covered with a dancing shirt and a Chilkat blanket, and his legs were encased in dancing leggings.

The shaman's power, like that of a common person, was increased by obtaining many split animal tongues, especially the tongues of land otters. These were combined with eagle claws and other articles, and carefully treasured. (See fig. 112.) The tongues of land otters, freshly killed, were also cut and their blood caught upon twigs.

When he came in to operate upon a patient the shaman ran rapidly around the fire in the direction of the sun's course, which was thought of as directly contrary to the course we understand it to take.[a] He cured by blowing or sucking, or by passing over the affected parts carved objects supposed to have power. Sickness was usually attributed to witchcraft and, after pretending to draw a spear or some other foreign object from the sick man, the shaman designated who had sent it into him. Shamans themselves had power to bewitch people. They could put spirits into inanimate objects and send them out to do mischief. It would appear from various stories that eagle down and red paint were also used in curing, for they are there employed in restoring the dead to life. In one story a shaman pulls a spear from the wound, thrusts it into water, and then blows eagle down over it.

[a] This was probably because the sun was supposed to return to the east beyond the southern horizon.

Besides curing the sick a shaman had many other functions, such, for instance, as the location of supplies of food and assistance against enemies in war. No matter how far apart they might actually be shamans of hostile towns were in the habit of dressing up to fight each other by means of their spirits. Sometimes they performed for no other reason than to show their power. Whenever they did perform their friends fasted and helped them sing the spirit songs, of which there are separate ones for each spirit. All kinds of tales are related of the power of these shamans. Thus it is said that some United States marines were going to cut the hair of a Sitka shaman, when his spirit came into him so powerfully that the arms of the big marine who was about to ply the shears were paralyzed and those of the other marines dropped to their sides.

According to Katishan, the spirits that came to Raven shamans had to be distinct from those that came to Wolf shamans, and it is probable that this held good everywhere. The prominence of sea spirits, such as killer whales, among the helpers of shamans is noticeably less than among the Haida. The sun spirit belonged to the Kîksa'dî, while the sea spirits came partly to Raven, partly to Wolf shamans. Spirits of the crest animals appear usually to have come to shamans of the families to which the emblems belonged. This is said of the woodworm of the Ǵānaxte'dî, but it may be that the prohibition applied only to its occurrence as a principal spirit. Certain shamans' spirits call themselves nīk qoa'nî ("sick people"). At Killisnoo there was a shaman who said that he had his power from "a big Russian."

FIG. 112. Shaman's medicine.

The Nanyaā'yî were so high-caste a clan that their spirits had very high names. One of these was called Curing Spirit (Wudzîne'xe-yēk) and another Man-under-the-earth (Antlā'yî-qa). Although Kack!a'lk! and Łq!ayā'k! were Kîksa'dî personal names at Sitka, at Wrangell they and their father Łakîtcane' all came to Nanyaā'yî shamans. The greatest of all the shamans' spirits of this family, however, was Unseeable (Łdjī'dîtīn), who was said to be chief of all shamans' spirits. He wore a tall hat and sat in the middle of a canoe in which were two other spirits. The spirit in the bow was called Bow-man (Cakahā'dî); that in the stern, Stern-man (Ātlī'gî).

This spirit first came years ago to an old Nanyaā'yî shaman named Big-killer-whale (Kīt-lēn). Whenever he said, "Łdjī'dîtīn's canoe is coming," some one would shout, "Let the Nanyaā'yî fast and change their clothing." After they had done this he said, "To-morrow the chief of the spirits will come ashore." Then the shaman dressed as

he saw this spirit, putting on a very large hat with a high crown, a dancing blanket, leggings, and a Chilkat blanket, and painting red stripes across his face. Then he sat on a very high box and sang. Afterwards he handed his baton to each of the Nanyaā'yî women in turn, who were now prepared to dance. All tried to imitate the shaman when he danced, but they were entirely unable to do so. From this circumstance the Nanyaā'yî have a personal name, Łie'-dukūktc, which means that no one can imitate the dancing shaman. After that the shaman tried to imitate the Bow-man, dancing with bow and arrows in his hands. Subsequently shamans in this family acted like Big-killer-whale, and Unseeable was always the first spirit which they saw. The shaman had to be very clean when Unseeable was going to come to him, nor would Unseeable allow any filthy person in his house. When the shaman heard Unseeable's canoe song he shouted out, "The shaman can hear Unseeable's canoe song. All the women must wash and fast." When Unseeable first came to the shaman he walked on water.

Spirits descended in one family from uncle to nephew. Rarely, if a man had no suitable clansman, his spirits would pass to his son. Sometimes a successor was named by the spirits before the shaman's death, and sometimes they named two, in which case the stronger-minded obtained the position.

When the shaman was in his last sickness his spirit would come to him and say, "You will die so many days from now." And when he was dying it said, "My master, you must be taken to such and such a place and be left there [for burial]." Then it would tell his clan what to do and where to live. The shaman's body was accordingly carried to the point indicated and left there without having been burned. It is said that his body always dried up instead of decaying like the body of an ordinary person.

Some time after the shaman's body had been put away the whole clan—men, women, and children—assembled in his house or in one belonging to the clan, where they remained and kept themselves very clean. While they were fasting there an honest youth, selected for the purpose, went out of the house and shouted "[Such-and-such a] spirit is coming in." Then they opened the door and let it in. They started the song of the spirit he had mentioned, and everyone pounded on sticks. While they were singing, the youth who was to succeed his uncle—who must be a young fellow of good character—dropped over and passed into a sort of trance. The people worked over him for a long time to make him come to. Now his clan felt happy at having a shaman among them, for they knew the clan would keep on growing.

The power of shamans was so much dreaded that whenever a person came across a shaman's house built in the woods he feared he would become sick and have his belly grow large. Then only another

shaman could cure him. It was thought that the finger nails of dead shamans would keep on growing and grow right through boards. No one would eat anything near places where their bodies lay for fear of being taken seriously ill, or even dying. Whenever one passed a shaman's grave in a canoe he lowered food and four pieces of tobacco into the sea in front of it, saying, "Give me luck. Do not let me perish. Do not let the wind blow so strongly on me. Let me find other food," etc. The eagle claws hung by the urine boxes of living shamans were asked to keep the petitioner in health.

FIG. 113. Anthropomorphic representation of the land otter, carved in bone.

Plate LVIII, *b*, *c*, *d*, and *e*, are said to be models of masks used by a Łuqā'xadî shaman at Alsek river, called Weasel-wolf (Ǫotcda'), and represented his spirits (yēk); *b* represents a spirit known as Cross Man (Anaxłxa'), called by the maker of this model "the strongest spirit that there ever was;" *c* was called Spirit-put-on (Ada'oli-yēk),

FIG. 114. Shaman's medicine box.

because it (the mask) was put on in time of war. The tongue is represented as hanging out, because the spirit gets tired in war time. The frog on the forehead represents another spirit; *d* represents the

Raven; *e* represents Land-otter-man Spirit (Kū'cta-qa-yēk), while the lines on each cheek represent starfishes, which are also spirits.

Figure 113 is another representation of the land otter, carved out of bone by one of the writer's informants.

Figure 114 shows a shaman's carved box, in which was a smaller box or case (fig. 115) containing the following "medicines:" Two bits of abalone shell each pierced at one end as if for suspension, one fragment of a dentalium shell, two or three bits of iron, a small piece from the

FIG. 115. Medicine case proper wound with human hair.

border of a Chilkat blanket, and fragments of two different kinds of plants. The box seems to have been closed at the top with a slide, which has disappeared. In the place which it should have occupied the finder of this specimen discovered a wooden comb (fig. 116), carved to represent an eagle or a thunder bird. Near the place where this was obtained two shamans belonging to the Kāsq!ague'dî are known to have been buried, one called Cq!atū' and the other Î'stīn-īc ("father-of-Î'stīn").

Figure 117 represents a wooden post that stood at the back of a

salmon trap. The human figure is Moldy-end (CAnyak!uLa'x), the boy who was carried away by the salmon and became a shaman, and the fish on which he stands is called "Spirit-of-his-feet" (duq!ō'syi yē'gi), meaning "the spirit which guided him."[a]

WITCHCRAFT

It is quite natural to find, along with the prominence of shamanism, a widespread belief in witchcraft. In fact this notion had so taken possession of the Tlingit mind that natural sickness or death was scarcely believed in. The friend of a person who was ill would go to a shaman and say, "I+++yAxō'At, I come after you." Upon hearing this the shaman stopped and looked all around. After the same words

FIG. 116. Shaman's carved comb.

had been repeated three times more the shaman went to the sick person and performed over him. Then he told who had bewitched him, at the same time pretending to draw out a spear, or something of the kind, from the affected part, while making a noise with his lips.

When caught, the wizard was tied up for eight or even ten days without food or drink, unless he confessed to the deed and agreed to find the witching medicine. After he had brought this out he waded into the sea up to his shoulders and scattered it. If he refused to confess he was liberated at the end of the time given, but not infre-

[a] For the story of Moldy-end see the references given on p. 458. These are Haida versions, but are practically the same as the Tlingit story.

quently he died before its expiration. Sometimes, however, his friends interfered and bloodshed resulted.

A wizard acted upon his victim by obtaining a piece of his clothing, some hair, spittle, or a fish bone from which the person in question had eaten the flesh. Then he made an image of his body, which he treated in the way he wanted the living person to suffer, making it a mere skeleton, to bring on emaciation; deforming the hands, to destroy the ability of a woman at weaving, etc. Spittle taken from a person

FIG. 117. Carved post placed on salmon trap.

could be used to make him spit himself to death, hair to give sickness in the head, and so with other portions of the body. The slime of a frog, which is supposed to be poisonous to other animals, was used to bewitch a person so that his eyes and mouth would bulge out like those of a frog. It is probable that the bones of a human being were also employed in witchcraft, as among the Kwakiutl, but the writer has no direct statement to that effect.

A certain Tcūkane'dî was a wizard before his conversion to the Rus-

sian Church at Sitka. He would lie on a sealskin and let it swim out of the house with him, and he would go out to sea just like a porpoise, as fast as the people could let the line out they had fastened to him.

A DAQL!awe'dî once flew about the house where a dead man was lying, in order to bewitch him. One night he was seen to fly out from a grave house and go up the Chilkat river, and the night following all the dead man's friends watched for him with their guns. At last one of these, who was sitting under a box where salmon were cut, heard a great noise, "Wh, wh, wh, wh, wh," and saw the thing perch on a flag pole and give out a squeak like that of an owl. He raised his gun and fired, and the wizard fell at the foot of the pole. He recovered, however, and is still living.

Mice are said to help wizards and witches to steal a person's property. It is supposed that they like to go inside of a dead body, for one time while some Sitka people were singing and beating time for a man who had been speared through the side of his head the body began to move and mice ran out of the wound and out of the mouth. On investigating they found that his insides had been all eaten out, and this within two days.

Another time a Haida came up to Sitka, married a girl there named Qałā'x, who had just reached maturity, and took her home with him. But all of a sudden her husband became sick. He would eat nothing until after all the people except his wife had left the house. Then his wife pulled dried salmon to pieces and set it before him, when mice began running out of his mouth, one after the other, to eat it. Last of all came a big white mouse, the mother of all the rest. After they were through eating he would open his mouth and let them run back inside.

Finally the man's friends discovered this and determined to interfere. Two of them went into an inside room with clubs and a third stood by the door. Then the man's wife again put out salmon and berries, and the mice ate them. Immediately afterwards she put fat on a tray as a signal to the men in waiting. So the man at the door and the two youths rushed in, saying, "This is the thing that is killing our uncle." The latter cried out, "Do not kill my white mouse. Save my white mouse," but they destroyed all of them. Then the chief's stomach was perfectly flat, and two days later he died, for the mice "had been breathing for him." After that all of his wife's brothers went down and took her home, and she told her father what had happened. For this reason, although she was the daughter of a chief, people did not respect her. They said, "We don't care about you. You used to feed mice."

The Haida are said to believe that one must not sleep under a berry bush or the mice will get inside of him.[a]

[a] For further material on witchcraft and shamanism consult Krause, Die Tlinkit Indianer, 283-301.

RELATIONSHIP BETWEEN THE TLINGIT AND HAIDA LANGUAGES

The grammatical structure of the Tlingit and Haida languages will be given elsewhere.[a] The possibility that they are related in some way was suggested first by Professor Boas, whose reasons therefor are given in the Memoirs of the International Congress of Anthropology[b] (p. 340–343). With the assistance of material recently collected, the present writer is now able to undertake a more exhaustive comparison along certain lines.

1. *Phonetics.* In this respect the two languages agree closely with each other and with other languages in the same region. In both, however, labials are used less generally, and those which occur seem usually to be onomatopoetic. In Haida *m* is found with some frequency, *p* rarely except when it is evidently onomatopoetic, and *b* has not been found more than five times altogether. In Tlingit *m* appears in a very few onomatopoetic expressions, but *p* and *b* do not occur in words of native origin. Tlingit is furthermore distinguished from Haida by a great expansion in the use of sibilants, in the absence of *l* which is replaced by *n*, and in the absence of *ñ*. The Tlingit language tends to shorten its vowels, resembling in this respect the Masset dialect of Haida, and differing from that spoken at Skidegate and the other southern towns. Obscure *u* and *o* sounds are used continually. Following is a comparative list of the consonants in the two languages:

Tlingit	–	–	[c]m	d	t	t!	s	s!	c	n	–
Haida	[c]b	p	m	d	t	t!	s	–	–	n	l
Tlingit	dj	tc	tc!	dz	ts	ts!	ʟ	ɬ	ł	y	g
Haida	dj	tc	tc!	–	–	–	ʟ	ɬ	ł	–	g
Tlingit	q	q!	x	g	k	k!	x̣	–	h	y	w
Haida	q	q!	x	g	k	k!	x̣	ñ	h	y	w

Harmonic sound changes are few in Haida and still fewer in Tlingit. The Haida transposition of *ł* and *l* is naturally wanting from Tlingit, where *l* does not exist, and the interchanges between *g* and *x* or *x̣* also seem to be wanting. There is, however, an interchange of *c* and *dj* or *tc* similar to the change in Haida from *s* to *dj* and vice versa. On the other hand, *u* and *o* sounds in Tlingit tend to change a following vowel into a similar sound, a phenomenon noticed elsewhere in North America but not observable in Haida.

2. *Roots and stems.* Tlingit words are nearly always resolvable into single syllables or single phonetics, each with a separate significance. Haida constructions are longer and more ponderous, but so many words may be resolved into grammatic syllables that all Haida stems may be regarded as having been primitively monosyllabic. In

[a] In the Handbook of American Indian Languages, not yet published. [b] Chicago, 1894. [c] Very rare.

the summary which follows, 581 Tlingit and 351 Haida roots are compared with reference to their phonetic composition, c standing for consonant and v for vowel:

	c	cv	cvc	cvcc	cc	ccv	cccv	ccvc	v	vc	vcc
Tlingit	17	155	367	10	..	..	..	..	7	24	1
Haida.....	13	120	133	1	4	35	1	30	6	7	1

It appears from this that the combination cvc is the most common in both languages, although the preponderance is more marked in Tlingit than in Haida, and that the combination cv stands second. Proportionally, stems consisting of single consonants and single vowels appear to be more numerous in Haida, but nearly all the existing stems of this character are probably included in the above enumeration. The 13 consonant stems in Haida are made up largely of the sounds, ɬ, ʟ, and *ł*, to which something of a vocalic character always attaches, while the 17 Tlingit stems are nearly all pure consonant sounds. Actually, therefore, single consonants may be said to be more extensively employed with grammatic significance in Tlingit, a fact in consonance with the short, choppy character of that tongue. The combination vc is also represented more largely in Tlingit. It is curious that while the number of stems of this type is comparatively small they are usually stems of fundamental importance.

Perhaps the most striking difference between these lists is the occurrence of combinations cc, ccv, cccv, and ccvc in Haida, which are entirely absent from Tlingit. It must be said, however. that the initial consonant in such cases is always *s* or an *l* sound—*l*, ʟ, ɬ, or *ł*—a circumstance which leads one to suspect that there is some particular reason for these combinations yet to be disclosed. In case they have been formed from descriptive terms it would be possible to account for those with initial *s* by supposing that *s* represents the Tlingit indicative prefix *s-*, which is always placed immediately before the verb stem. In the same way initial *ł* and ɬ might be supposed to represent the Tlingit verbal prefixes *ł* and ʟ, which are also placed immediately before the stem. Besides mere morphological similarity, however, the only point that may be said positively to favor this view is the fact that Haida stems of the kind are generally utterly divergent from Tlingit stems of corresponding meaning. This is what would be expected if some form retained in Tlingit were replaced elsewhere by a descriptive phrase. The second consonant in the forms cc is always ʟ, ɬ, or *ł*, to which, as before said, something of a vocalic character attaches.

All this would appear to indicate that the great majority of syllables in the two languages primitively belonged to the types cv and cvc, and, while the relative proportion of the type cvc in Tlingit is very much greater than in Haida, there are certain reasons for qualifying the importance of this difference. In Tlingit, for instance, we have

to deal with a set of suffixes composed of single consonants, and it is not always certain that a supposed stem CVC is not really CV plus the suffix *-c*. On the other hand, there are many Haida forms of two syllables ending in a weak vowel, this vowel being perhaps of no significance. Supposing this to be the case, all such stems would resolve themselves into single syllables of the type CVC and increase the proportion of such stems just so much.

To assure ourselves that a comparison of languages on the basis of the types of stems which they contain is of real importance it would be necessary to make similar classifications of the roots and stems of several other languages. This has not been carried out extensively by anyone so far as the writer is aware, but an attempt to treat one of the Athapascan dialects in this manner seemed to show that in this respect Athapascan and Tlingit are much more closely related to each other in this respect than is either of them to Haida.

3. *Word composition.* In both Tlingit and Haida nouns may be stems, they may be formed by combining two other nouns, or they may be taken from verbs or adjectives. In forming a compound two nouns observe the same order as in English. These facts, however, are world-wide and furnish no basis for comparison. The absence of formal gender from both is of little more significance. Tlingit appears to differ from Haida in possessing a plural, but this is really a collective, and nouns in the plural do not require it. On the other hand, certain Haida words referring to human beings have a special plural or collective form which corresponds in a measure grammatically, though not morphologically, to the Tlingit. In both languages terms of relationship take a special plural, but the Tlingit is formed by suffixing the personal pronoun of the third person plural, or indefinite person, while the Haida suffix is never employed independently. Cases are lacking in Haida, case relations being expressed by postpositions, and though what have been called cases exist in Tlingit these are expressed by suffixes, which differ from other postpositions in the language only in the fact that they are single sounds. One of them, moreover, occurs, with precisely the same function, in an expanded syllabic form. Tlingit nouns also take diminutive and intensive suffixes absent from Haida, but it will be shown later that they appear to be represented there in another manner. Both languages distinguish between an intimate, more or less reflexive, kind of possession and one which is more remote, tending to become syntactic; and the latter is expressed in exactly the same manner by both, i. e., the objective personal pronoun is prefixed to the noun and a special syllable suffixed. To indicate intimate possession, however, Haida employs a distinct suffix and dispenses with the pronominal prefix, while Tlingit employs the pronoun and omits the suffix. Haida adjectives of shape and size take a special plural or distributive suffix not represented in Tlingit.

and in the same language we find a suffix with connectives indicating motion in the particular place just referred to. Both have a distributive suffix used after numerals and a few other words.

In the verb we find marked differences. Tlingit verbs have so few affixes that, including a prefixed auxiliary and three substantives very frequently used as prefixes, so far 27 only have been enumerated, while in Haida there are as many as 115. Their distribution with reference to the stem is also very unequal. Of the Tlingit affixes 18 come before the stem and 9 after it; in Haida 60 precede and 55 follow. In actual usage, however, the difference is still more marked. In Tlingit more than one suffix is rarely found in the same verb, and suffixes are often entirely wanting, while the ratio of suffixes to prefixes in any one Haida verb is at least as two to one.

Coming to the varieties of ideas expressed by affixes, we find in Haida, besides 16 affixes of miscellaneous character, a series of morphological affixes, an instrumental series, locatives, temporals of two orders, modals, and 10 suffixed auxiliaries. In Tlingit, however, the first three are entirely lacking, locatives being expressed by adverbs, and auxiliaries are represented by the causative only. This is as much as to say that the bulk of Tlingit affixes are temporal and modal. Nouns are taken up into the Haida verb much more easily than into the Tlingit verb, and the combination of two verb stems, which is very common in Haida, is unknown in the other language. This great divergence between the verbs is mitigated only by the close resemblance among several Haida affixes and the consequent possibility that they have been differentiated from one original, and, by the great independence of those affixes, suggesting word composition rather than a real subordination of elements.

4. *Structure of sentence.* In Haida the verb—or a breathing representing it—almost invariably stands at the end of the sentence, but, while this is commonly the case in Tlingit, the nominal subject or object or a noun and postposition frequently follows. Adverbs precede the verb, usually immediately, in both languages, and are closely related to the postpositions, of which each language has a great abundance. They also agree in placing adjectives after the nouns they depend upon and usually in placing the nominal subject before the nominal object. More important is the fact that the pronominal subject in Haida and the pronominal subjective prefix in Tlingit follow the corresponding objective forms.

5. *Lexical similarities.* Having considered the kinds of phonetics used by Tlingit and Haida, the types of stems and roots, and the composition of words and sentences, we come to the most important point of all—actual similarities in form. This, which is ordinarily the first criterion appealed to, is reserved until the last, because such similarities are confessedly scanty and because such as exist must be viewed

in connection with the morphological characters just considered. There are a certain number of nouns in both languages which are practically identical, although showing slight phonetic variations. Such are the following:

English	Tlingit	Haida
grizzly bear	x̱ūts!	x̱ū'Adjī
wolf	gōtc	gōdj
ground squirrel	tsAłk!	djo'lkī
a sea bird	ługuâ'tc	łAgua'djī
marten	k!ux̱	k!ū'x̱u
abalone	gu'nxa	gu'lga
moose	tsisk!	tcī'sk!ʷ
skate	tc!ī'tga	tc!ī'tga
raven	yēł	yēł (Masset dialect)
fox	nagas!e'	nā'gadjē
fur seal	q!ūn	k!ō'un
drum	gao	gaodja'o
wolverine	nūsk	nūsk
iron	higayê'ts	higayê'djī

It must be said of grizzly bear, wolf, ground squirrel, moose, fox, and wolverine, however, that the animals are not found upon the Queen Charlotte islands, and that consequently the Haida could learn of them only through their mainland neighbors, whose names they would very naturally adopt. It is true that at the present time the Tsimshian are nearer neighbors of most of the Haida than are the Tlingit, but according to the traditions of both Tlingit and Tsimshian the latter formerly dwelt inland, while the Tlingit have moved northward from the coasts which the Tsimshian now occupy. Yēł, the Masset word for raven, may have been adopted from the Tlingit in place of the word xō'ya used at Skidegate, although it is to be noted that the former word occurs in names of houses in the southern towns as if it were well known. The abalone here referred to was not the small native variety, but a large specimen introduced from California in trade, and it is quite likely that one people adopted the word from the other. The same argument applies with still more force to iron, and even the similarity of the names for fur seal may be explained in this manner. The term for drum, on the other hand, appears to be onomatopoetic, and may have been evolved independently by the two peoples. Gaodja'o seems to mean "the thing which gives forth a gao noise." This leaves only the words for marten, skate, and a sea bird unaccounted for, and, if our interpretation of the use of yēł be admitted, we may perhaps assume that these words represent the process of adoption carried to completion. Their striking similarity in the two tongues appears in too marked contrast to the utter divergence of the bulk of the vocabularies of both languages to allow us to infer on this ground alone that we have here anything more than an exchange of words. If no more profound resemblances

than these could be discovered, the question of relationship would have to be answered in the negative.

Before taking up the other points of resemblance, a comparative list of stems taken at random is given, between which there is no agreement, in order to show the unpromising nature of the task. Hyphens are used to indicate prefixes and suffixes.

ENGLISH	TLINGIT	HAIDA
to dwell	u	na
daughter	sī	gudjañ
to desire	ci	qao
with	n	at or ał
father	īc	gōñ (man's), xāt (woman's)
slave	gux	xA'ldañ
to cause (auxiliary)	ka-	-da
downward	yi	-t!ał
they, them	hAs	L!, -lAñ
(continuation of motion)	ya-	-gAñ
shoreward	dāq	-gīł (or -gial)
as follows or precedes, like this	ye	hAn, hin
to say	qa	su
into a house	nēł	-tc!a
again	ts!u	î'sîñ
long	yAt!	djīñ
man, male person	qa	īłñ
berry	k!ît!	gān
to put, do	tAn	skît
to go (many persons)	at	dal
to go (one person)	qa	gu
(plural or collective suffix)	-q!	-djît
on	ka	un
foot	q!ōs	st!a-i
at	q!	gu
very	LAX	-yū'An, -djłī'
now, right now, close by	tc!a	xAn, hAn
thing	At	gī'nA
to marry	ca	īn
I	x-, xAt	ł
you	î-, wae'	da, dAñ
him, her, it, his, hers, its	Ac-, du-, a-, hu	la
one	LEq!	sgoan
two	dēx	stîñ
(completed action)	wa-	-gī
(reflexive)	c	agA'ñ
mountain	ca	Ldaga'o
head	ca	qā'djî
like	yêx	gaña'ñ
mind	tu	gut
to be	ti	ē'djî, îs
there	yên	gu
(perfect tense)	du-	ya
completely	cu-	ła-,-'odju

ENGLISH	TLINGIT	HAIDA
(passive prefix)	wu-	ta- (rare)
from	x	sta
salmon	xāt	tcīn
fresh water	hīn	ganṭ
however	qo'a	ʟ!
up, upward	ke	sa
when, after	ga-	ṭu
into	tu	gei
not	(ʟē) ł	gam
firewood	gān	tcłā'anu
smoke	s!ēq	gā'yao
to help (as a supernatural being does)	su	q!an
you, your (pl.)	yī-, yīhā'n	dalA'ñ
night	tāt	gāl
quickly	dji-	xao-
to rot	ʟ!ak	q!ol(go)
back, backward	qox	sīłgā'ñ
to weep	gāx	sgaīł
lake	a	su
seaward	dak	-sga
big	ʟēn	yū'an
to float	xāc	ga-i
canoe	yāk"	ʟu
this	he	a
to pull in	yēq	dañ-
to kill	djaq	tia (sing.) ʟ!da (pl.)
father-in-law	wu	qō'na
to know	ku	u'nsaat
house	hit	na
woman's brother	īk!	da
man's sister	ṭā(k!)	djās
mother	ʟā	ao
entirely destroyed	qot	ha-ilu
moon	dis	qoñ
to eat	xa	ta
husband	xox	ʟāl
hand	djīn	sʟ!a-i
close to	wan	ʟā
to die	na	k!ō'tał
to make	yax	gōłga
mouth	q!a	xē'ii
to laugh at	cuq	k!a
to shoot with a bow	t!uk	tc!it
to name	sa	kīga
to be daylight	gan	siñ
red	łēq!	sgēt
to ask	wus!	kian
what?	da(sa)	gūs, gasi'ñ
spear	yīs	q!a
to cut off	xac	q!eit
copper	ēq	xal
and	qa	giēn

ENGLISH	TLINGIT	HAIDA
hole	t!aq!	xēl
where?	gu	gī'sgēt, gī'ʟgan
face	yêt	xʌñ
good	k!e	la
to be ashamed	dēq!	geiłxa
post	gās!	gia'gʌñ, xāt
no	ʟēk!	ga'oano
tooth	ux	tc!iñ
inside	gē	qā'łi
halibut	tcāʟ	xā'gu
hair seal	tsa	xōt
to stay or dwell for a time	xe	na-u
to become	nuk^{u}	geił
whale	yāł	kun
the last, the end	hūtc!	ʟan
nephew	qeł	nāt
cheek	wac	qʌ'nsidu
blood	cī	ga-i
song	cī	k!ʌ'gan, sgā'lʌñ
box	kūk	gō'da
nest	kut	łtʌ'lga
a spirit, supernatural being	yēk	sgā'na
cliff	gāʟ!	stʌl
eagle	tcāk!	gōt
to think	djł	gut
eagle down	q!âʟ!	łtʌ'ngo
to be afraid of	xēʟ!	łgoa
shaman	łxt!	sgā'ga
us	ha	łʟ!
friend, clansman	xon	łtā'xui, ta'olʌñ
to crawl	cī(tc)	ʟxu-
finger	ʟ!ēq	sʟ!gʌ'ñē
grandparent	łił	tcłn (male), nān (female)
to rub	t!us	nan
to hide	słn	sq!ul
ribs	sū'go	xē'wi
shell	yīs!	q!ʌl
old person	cān	q!a-i
floor plank	t!a	tc!u
tree	ās	qa-it
(imperative particle)	dê	ł
to float	tłt	ga-i
kelp	gīc	łqeam
to start traveling	xūn	qa-it
stick or club	qās	sq!ā'ñu
to weave	ʌk	xa-i
to stand	hān	gia
to invite	łq!	kia
sea lion	tān	qa-i
hair	cāx	qā'djł
mussels	yāk	gʌl
shell	nuk!^{u}	q!ʌl
enemy, warrior	xa	qa-ido

English	Tlingit	Haida
cloud	gûts!	yên
fort	nu	t!a'odjî
heart	tēq!	k!ū'ga
we	tu	t!alA'ñ
herring	yao	īna'n
to fly	qēn	x̣īt
to tie	sa	kiu
mouth of (stream, etc.)	wAt	t!ā
dog salmon	tīL!	skā'gi
humpback	tcās!	djidA'n
nose	łu	kun
point	q!a	kun
(future sign)	gu	-sga, -asañ, -qasañ
neck	sA	xêl
sea water	ēL!	tāñ
to spit	tōx	tc!iñ
paddle	axa'	āl
tongue	L!ū't!ī	t!ā'ñAl
to dance	L!ēx	x̣iał
salmon trap	cāł	gī'ao
mat	gātc	lgūs
to paint	xît	dā'gAñ
to be sick, sickness	nīk^u	st!ē
snow	ḷēt!	t!aga'o
sea otter	yA'x̣^{u}tc!	qō
younger brother	kī(k!)	da'ogAn
hat	s!āx̣^{u}	da'djiñ
skin	dugu'	q!Al
to feel	t!e	gān
spruce	sīt	qa-it
bone	s!āq	skū'djî
weasel	da	ḷga
mashed shell	kAts	k!A'mal
ground hog	s!āx	gwīg^u
rain	su	dāl
waves	tīt	lū
frog	x̣ix̣tc!	łk!ō'nq!ostan ("forest crab")
spear	LāQ	q!a
spoon	cAł	sLā'gwul
breast	xet	qAn
to give	łu	î'sda
grease	ēx	tao
retaining timbers	t!Aq!	da'ai
fog	qogā's	yä'nañ
to become good weather	dāq	ḷai
dog	kēL	xa
black bear	s!īk	tān
red cedar	łax	tc!u
food	wu	ga-ta, tao
to become calm	yēL!	ḷa-i
clam	gāL!	k!iu
back (part of body)	dAq!	skwa-i

ENGLISH	TLINGIT	HAIDA
stomach	q!oL!	k!ē'djì
foam	xēł	sgoł
medicine	nāk^u	xil ("leaf")
daylight	qea	sîñ
sand	L!ē'wu	tās
dorsal fin of killer whale	gū'cî	łgan
killer whale	kīt	sgū'na
to drink	cu	nēł
to blacken	t!utc!	łgał
deer	qowakā'n	k!āt
beaver	s!Agē'dî	tc!iñ
land otter	kū'cta	sLgu
alder	cēq!	qAl
yellow cedar	xā'i	sgała'n
crab apple	q!uts!	k!Ai
hemlock	yên	q!Añ
finger nails	xāk^u	sL!ku'n
eyebrows	s!ī	skä'djì
chin	tī	lkai
porpoise	tcītc	sqol
shark	tūs!	q!ā'xada ao ("dogfish mother")
steelhead	acA't	tā'iña
flounder	tsA'nti	skA'ndal
red snapper	łēq!	sgan
sculpin	wēq!	k!āl
chiton	cao	t!a
grouse	kāq!	sqao
sea gull	kē'ɩadî	sq!ên
robin	cuq!	t!in
blue jay	q!ēcq!	L!ai'L!ai

It may be advisable to hold under suspicion those cases in which the form in either language consists of more than one syllable, because such form may originally have been a descriptive term replacing a former word. There are, too, many forms in one language which do not agree with the forms of precisely equivalent meaning in the other, but which do agree with some forms of slightly different significance. In such cases it is permissible to suppose that they have diverged from some common original. With all due allowances, however, the divergence between the vocabularies of the two peoples is certainly very marked and it would be possible to expand the list of differences to two or three times their present extent.

On the other hand, there is a considerable number of words and affixes which do present resemblances. Such are the following:

TLINGIT	HAIDA
łingi't, people	ilñ, male, man
qa, male, man, person	ga, some persons or things
u, to dwell	u, to continue in one place (na-u, to dwell)

TLINGIT	HAIDA
-yī, possessive suffix	-ga, possessive suffix
dê or -t, to	dA (Masset dialect), to
gē, inside of	gei or gē, into
dī- or da-, inchoative verbal prefix; also xūn, to start off	-xīd (Masset -īd), to begin to do anything
we-, that distant thing	wa-, that distant thing
ga, for (a person)	gAn, for; ga, to or in; ga (Masset), to (a person)
-x, distributive verbal suffix, and distributive suffix with nouns and connectives	-xa, distributive suffix to numerals, connectives, etc.
tī, to be	-dī, suffix which seems to indicate that an action was performed at a certain special time
yīt, son	gīt, son; yagê't or ya'ê't, chief's son
sa, to name; su, to render help by magic, etc.	su, to say
tāt, night; tāk, year; tādj, cold	tāt, cold, and year
de, already, right now	dei, just that way, carefully
gên, to look	qên, to look
-k!ᵘ, diminutive suffix	k!u-, k!At-, diminutive prefix
k!Ats!, small (At k!A'ts!k!u, child)	k!A'tdju, something small
he-, this	hao, this, that (a very general demonstrative)
-t!, back of, behind	t!a, back of
qot, destroyed, vanished	k!ot, to die, dead body
cAt, wife; cā, cawA't, woman	djat, wife; djā(ga), his wife
yis!, knife	yātc, knife
q!wAn, now! (also sign of imperative)	k!wai, now! pray!
gu, where? at what place?	gu, there, at
k!ūn, many	qoan, many
xā'na, evening	si'ñxi, evening (siñ=day)
tāi, fat; tu, grease	tao, grease; in Masset dialect, "food"
tāq!, to bite, or chew	tā, to eat
ta, stone	tās, sand, or gravel; t!ēs, stone
ūx, to blow (wind)	xūt, to blow (wind)
Lākᵘ, olden times	LAkᵘ, forever
kAt, spear; xit, to push with a stick	kit, to accomplish by means of a stick, to spear; ki'tao, spear shaft
hakᵘ, now!	ha'ku, now!
ta-i, to lie; ta, to sleep	ta-i, to lie, to be prone on the ground
tākᵘ, in the middle of	yākᵘ, middle; tadju', half
kā'ni, brother-in-law	qea, brother-in-law
dūł, sand-hill crane	dī'lA, sand-hill crane
sīt, to cook	sīł, to steam
t!A'ne, bough	t!An, a knot, or the stump of a limb which has rotted out of a dead tree
qon, before	ku'ngAstA, before (ga and stA are probably incorporated postpositions)
gei, bay	gao, bay, harbor
gAn(tc), leaf tobacco	gul, tobacco
L!a, woman's breast	L!īn, woman's breast
xūn, north wind	xao, north wind (Masset dialect)

TLINGIT	HAIDA
k!oLk, mud	q!oe, mud
huk, to shout	huk, upon them! (war cry)
łukcayā'n, mink	sīyā'n, mink
kAgā'k, a very small mouse	k!AgA'n, Keene's mouse
(qa)gū'c, thumb	sL!gō'sē, thumb (sL!=hand)
q!A'tgu, dogfish	q!ā'xada (Masset, q!āad), dogfish
tsā'gAł, war spear	tcā'aL, war spear
agA, interrogative particle	gua (Masset, gu), interrogative particle
kāk, maternal uncle	qa, maternal uncle
gūk, ear	giū, ear
łAq!, heron	łgo, heron
naq, devilfish	nao, devilfish
sāk, eulachon	sao, eulachon
dAq, to give food to guests	dayu, to give food to guests

Following is a list of cases of a more doubtful character:

TLINGIT	HAIDA
u, active verbal prefix	u, he (replaces *la* in rapid discourse)
tīn, with	dA'ñat, in company with (the final syllable is probably the connective *at*, "with")
ka, on, at	ga (Masset), to
At, something	At or Ał, with, of
-t, verbal suffix indicating purpose of leading verb	(to this may correspond either the postposition *da*, often used after infinitives, or the causative auxiliary *da*)
qaca, human head (qa=man)	qā'djī, head
gān, to burn	gō, to burn
xō, among	sū, among
q!Aq!, for, on account of	k!iao, on account of
x̣, to run	x̣ao, to do quickly
ki, in the direction of	gui, toward (with motion)
łatsī'n, strong (ła is a prefix)	LA'djī, strong
k!Ak!^{u}, to cut	q!eit, to cut
xēq!, to go to sleep	q!a, to go to sleep
tAq, to push, to spear	da-, to do anything by pushing
q!āt!, island	qā'ła, reef
gīt, to do, to come to be	gēt, to be like, to be so
tīł, body	łu, body
kis!, to be finished	gī, to be finished
get, to be dark	gāl, night
xAn, to live, exist	xa'ida, person
qōłī'q!o, walrus	qo, sea otter
t!A, spring salmon	tā'gun, spring salmon
wēq!, sculpin	k!āl, sculpin
kahā'gu, seed	qao, seed
tcukA'n, grass, brush	q!An, grass

Besides these there are four or five points of resemblance which require more extended treatment. One of these is the persistence of the consonant *n* in words referring to race, people, town, house, etc. Thus, in Tlingit *na* means nation or people; *nu*, fort; *ān*, town; and *tān*

family or stem. In Haida *na* means house, or to dwell, and *lā'na* or *lna*, town. The occurrence of *l* as an initial vowel in Haida is rare and suggests the possibility that it stands for the pronoun of the third person, which is identical in form. Tlingit *tān*, on the other hand, suggests Athapascan *tînne* or *déné*.

A second analogy is furnished by the Tlingit intensive, or, as Professor Boas has called it, selective suffix *-tc*. This is placed after nouns, pronouns, and even adverbs, to which it is desired to call attention, as: lingî't, intensive lingî'ttc, people; xat, intensive xattc, I; lēł, intensive lēła'tc, not. It recalls strongly a Haida demonstrative, *ā'djî*. The *ā* by itself would represent the usual Haida demonstrative indicating something near at hand, and *dj*, which is practically the same as *tc*, the Tlingit intensive.

The consonant *n* is also persistently found in suffixes indicating different sorts of past action. Thus the only Tlingit suffix of strongly temporal character is *-n*, *-īn*, or *-ōn*. This seems to correspond most nearly to the past perfect. At the same time it appears to refer by preference to an action which has taken some time, or has been a customary action. In Haida, on the other hand, we have several suffixes; *gīn*, which indicates a customary past action which the speaker has himself observed or experienced; *gan*, which indicates a simple past action experienced by the speaker; *gan*, indicating any sort of past action; and *gañ*, which indicates that an action has been or is being continued for some time. The *g* or *ǵ* in each of these cases is not an insuperable obstacle to a relationship between them and the Tlingit suffix, because it is often dropped, especially in the Masset dialect, or after *d* or *t*; in fact it is a question whether we should not rather regard the *g* sounds as insertions instead of constituent parts of the suffix.

Most curious of all, perhaps, is the analogy presented by certain affixes having *s* for their essential element. In Tlingit there is a prefix *s-* or *sî-*, which is always placed just before the verb stem and employed in simple direct statements, past, present, or future, for which reason it may be called the indicative prefix. Examples: *łēł da sa a'wustîn*, he did not see anything; *le sîdja'qx*, they always killed them; *ducA'ttc yé'yaosîqa*, his wife told him; *daqanē'x wusîti'*, he was quarrelsome. In the same language we find a particle *as* of almost identical meaning (xatc xîxtc!î'k!u *as*iyu' ducA'ttc de ayu' aołixā'c, this little frog *it was* he let float to his wife), and, in view of the great independence which the parts of the verb enjoy, it is concluded that the two are actually identical. Now, there is in Haida a very puzzling suffix, *-s* or *-sî*, which has a very wide range of use. After a noun preceded by the indefinite pronoun it makes the expression definite; in other cases it seems to show that the clause it follows is to be taken as a whole—in other words, to turn it into a participle or infinitive, and with some speakers

it even replaces the regular suffixes of the past tense. The Haida forms are, in fact, about what we should expect if the Tlingit particle *as* should become agglutinated to the verbs it so often follows. Possibly we also have here an explanation of the origin of the Haida verb "to be," which usually appears as *ē'djî*, but contracts to *îs* in composition.

The consonant *s* also figures in another connection. Most Tlingit interrogative pronouns and adverbs are accompanied by a syllable *sa*—*da'sa*, what? *wa'sa* how?—and Haida interrogative pronouns and adverbs contain this same consonant *s* with such uniformity as to lead one to suspect it was originally an affix, viz, *gī'sto*, who? *gasî'ñ*, why? what? *gūs*, what? *gū'gus*, what? *gī'sqēt*, where? *gīsî'(stahao)* whence?

Both languages also make a very extensive use of a general demonstrative form *a* to stand for nouns or pronouns, and in both it is often used to form compound demonstratives or connectives. Finally, as savoring of dialectic change rather than borrowing, attention should be called to the fact that the last six words compared in the list completed at the top of page 483 appear to change regularly from Tlingit to Haida by dropping a final *k* sound or replacing it with *o* or *u*.

Conclusions. In spite of the very great divergences which these two languages present, the points last considered, along with many of the coincidences noted on pages 481–483, can hardly be accounted for on the basis of either borrowing or coincidence. They seem to the writer to be the faint echo of a time when the ancestors of some of the people now represented by the Haida and Tlingit spoke one tongue, and there is certainly nothing in the structure of stems, words, or sentences to contradict this view. At the same time, in order to bring about the differences which now exist, the two peoples must have lived long apart and have been subjected to very different influences. It is quite possible that, instead of being immediately related, Haida and Tlingit have developed separately from some third language, and, unless it were one now entirely extinct, this would naturally be Athapascan, the only language in this region that either of them resembles at all closely. We shall be unable to come to a definite conclusion on this point until the neighboring Athapascan dialects have been thoroughly examined, analyzed, and compared with Haida and Tlingit.

PLATE XLVIII.

Explanation of Facial Paintings—Plate XLVIII

a. Ǫonaqadē'ṭ hat and accompanying facial paintings. This belongs to Wuckīna' K!ahugī'c, one of the Kā'gwantān, the chief who held the last potlatch at Sitka. When messengers were sent out to invite people from other towns to this potlatch the crest hats were named aloud, one after the other, beginning with this. The nine following are arranged in the order then observed.

b. Eagle hat (*tcāk! s!āx̣ᵘ*). The painting on the face is called "double-cross painting" (*k!ēct wucīna'*). Used by the Kā'gwantān of Sitka and Chilkat.

c. High-caste killer whale [hat] (*kūt anyē'dī*). The facial painting is the jaw of the killer whale seen from in front. This belongs to Łontī'tc, principal speaker of the Kā'gwantān clan at Sitka. At the time of the last potlatch, instead of going in person to invite the guests, he sent his hat.

d. Wolf hat (*ǫōtc s!āx̣ᵘ*). The facial painting is called K!asa-ī'da, and represents the red of a wolf's mouth when its lips are retracted. It belongs to the Wolf-house people of Sitka, part of the Kā'gwantān.

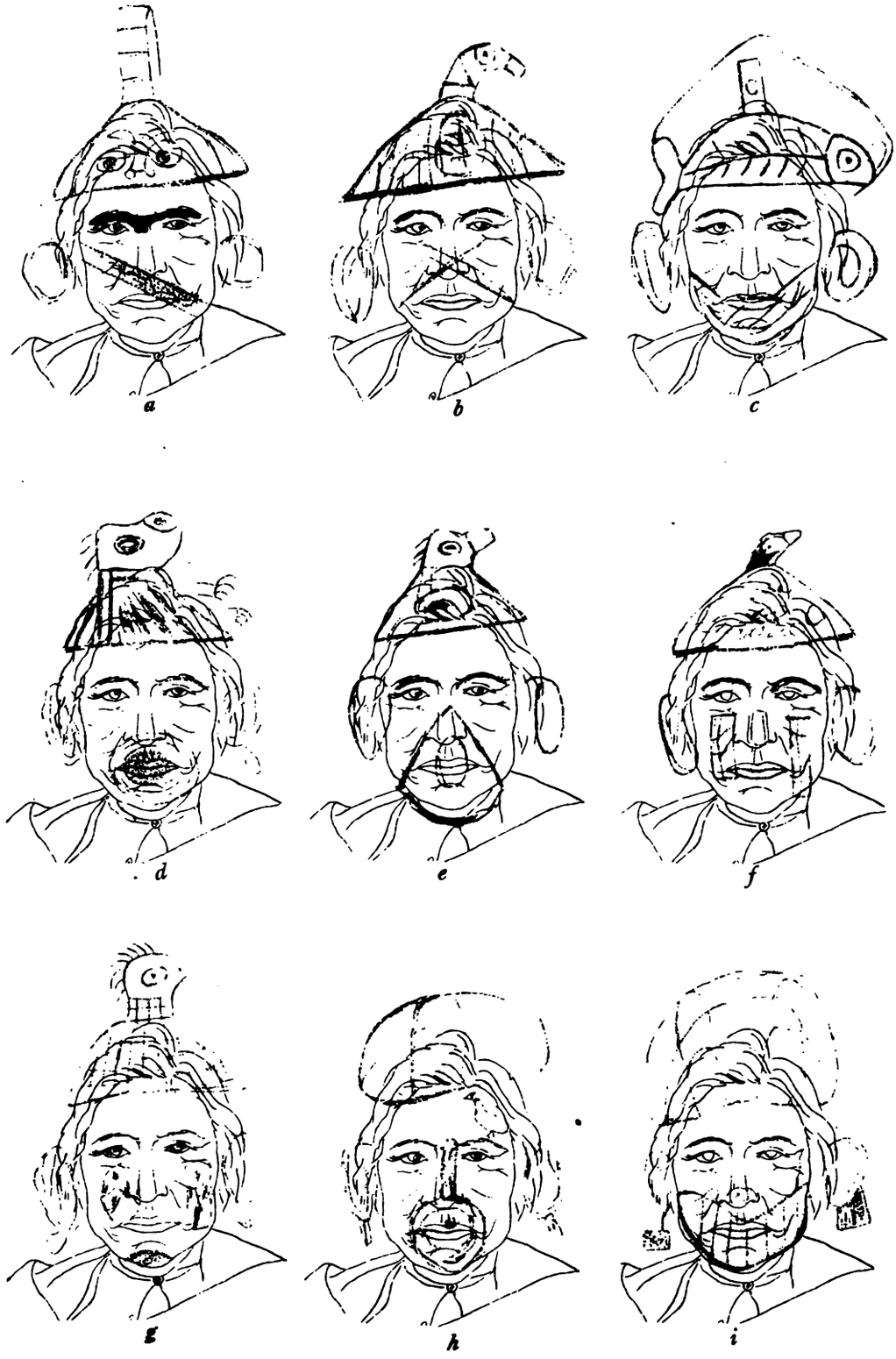
e. Petrel hat (*ganū'k s!āx̣ᵘ*). The facial painting shown always accompanies, but the writer's informant was unable to tell what it means. It is used by the Ravens of Chilkat.

f. *Tc!īt s!āx̣ᵘ.* Tc!īt is the name of a small bird, which the writer has not identified. The markings on the hat are supposed to represent herring, which this bird is said to push up on the surface of the water from underneath. Painting unexplained. Used at Chilkat.

g. Raven hat (*ǫēt s!āx̣ᵘ*). The facial painting is said to be without significance. Used at Huna.

h. Hat and painting illustrating the adventure of Raven and a clam. The painting is called *ǫēs kādē' wucīna'* (clam painting). The clam itself is represented over the mouth, its head extending up the nose. Over the left eye is Raven. The hat represents the mountain or cliff in front of which lived the clam, but the yellow band across it is also the clam's head. Used at Huna.

i. On the head are bear ears (*x̣ūts! gangū'c*), and on the face is a painting called "bear traveling" (*x̣ūts! da'ǫa qō'xo*). The latter refers to an episode in the Raven story in which Raven went fishing with Grizzly bear and Cormorant. The canoe is represented with Grizzly bear in the center, Cormorant in the bow, and Raven in the stern. The earrings have a special name, "That-can-be-seen-across-Nass" (*Nās-kana'x-dutī'n*). Used at Killisnoo.



FACIAL PAINTINGS OF THE TLINGIT INDIANS

PLATE XLIX.

EXPLANATION OF FACIAL PAINTINGS—PLATE XLIX

a. On the head are bear ears, and on the face is the star facial painting (*kotxai'-yʌnaxa wucina'*). The earrings are called "Shark's-tail earrings" (*tūs!-kuwu'-gukʌ't*). Used at Killisnoo.

b. Called *yuqī's!-kuqē'k*, and said to be the raven that has charge of the falling and the rising of the tide. When the hat is first put on, the wings cover the face, but when the nose is struck they fly open. Used by the TAq! hît tān.

c. A hat illustrating the story of a man (the figure in the center), and two girls (on the sides) who turned into stone while trying to cross Alsek river. Used by the Łuqā'xʌdî.

d. Whale hat (*yā'-i s!āx̣ᵘ*) with bird facial paintings. Used by the T!ʌ'q!dentān.

e. "Mountain-being's dog" (*cā-toqoa'n kē'ṯî*). Used by the TAq! hît tān.

f. Mouse hat (*kutsl'n s!āx̣ᵘ*). The paintings on the cheeks are supposed to be the mouse's feet. Used by the Kosk!ē'dî.

g. Grizzly-bear-claws hat (*x̣ūts!-xā'gu s!āx̣ᵘ*). The bear referred to is the son of the hero Kāts! mentioned on page 455. Around the mouth is the bear's blood. Used by the Q!AQ!ā' hît tān, probably a subdivision of the Kā'gwʌntān.

h. Shark hat (*tūs!-caî s!āx̣ᵘ*) with devilfish facial painting. Used by the Kā'gwʌntān.

i. Salmon-trap hat (*cāł s!āx̣ᵘ*). The inner pocket of the trap is at the top with a salmon represented inside. The entrance of the trap is indicated on the face with salmon swimming about in it. Used by the "deer" of any family in making peace (see p. 451).

FACIAL PAINTINGS OF THE TLINGIT INDIANS

PLATE L.

Explanation of Facial Paintings—Plate L

a. Fort deer (*nū'wu qōwakā'n*). The stockaded fort is represented by the hat. The painting is unexplained. Used by the "deer" of any clan in making peace.

b. Red deer (*leq! qōwakā'n*), so named from the facial painting. On each side of the headdress is an eagle feather, midway between these an eagle quill, and below this a weasel skin. Used by the "deer" of any clan in making peace.

c. At the top are grizzly-bear ears (*χūts! gʌngū'c*), and around the mouth lines supposed to represent the opening of a bear's den. Used by the Kā'gwʌntān.

d. On the head is a grizzly-bear hat (*χūts! s!āχ^u*), and below a painting representing a copper supposed to be held in the mouth. Used by the Te'qoedī.

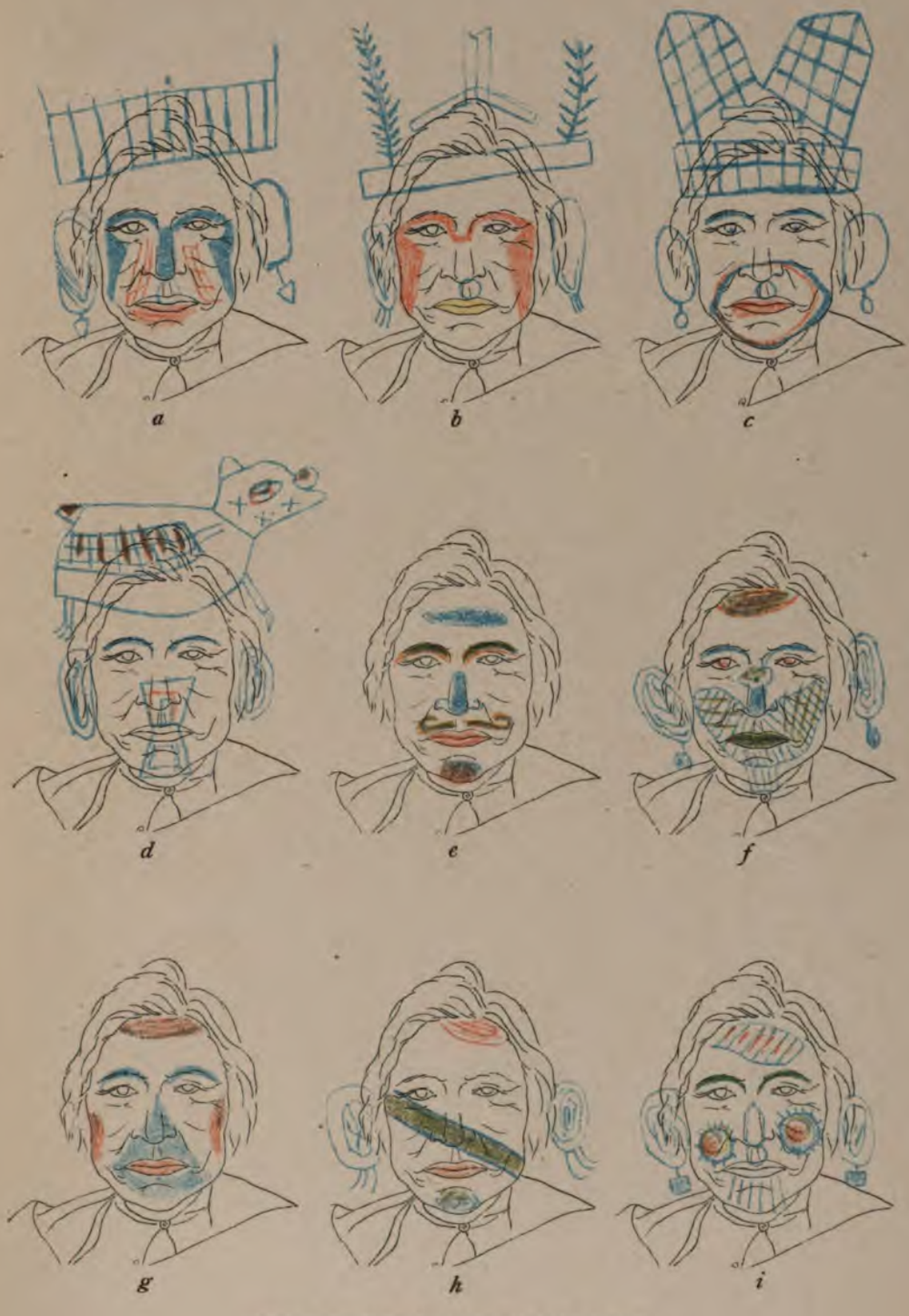
e. Tsałxā'n, a mountain near Cape Fairweather, Alaska. The summit of the mountain is represented on the forehead, the base on the chin; between are clouds. Used by the T!ʌ'q!dentān.

f. Tsałxā'n, in calm weather. The mountain is painted around the mouth, and fair-weather clouds are on the forehead and ears. Used by the T!ʌ'q!dentān.

g. Facial painting, representing a rock called Tʌ'naku (*tʌ'naku yʌkuχī'da*), a crest of the T!ʌ'q!dentān. The blue around the mouth represents the rock, the other patches of color being purely ornamental. Used by women of the T!ʌ'q!dentān, though here represented on a man's face.

h. Tʌ'naku. The green band represents the slope on the landward side of this rock, and the smaller spots represent clouds. Used by the T!ʌ'q!dentān.

i. Tʌ'naku house (*tʌ'naku hît*). The front of the house is indicated on the nose and chin, and boxes of food lying inside of it are suspended from the ears. The forehead markings are said to stand for trees, and the two large spots for puffins, numbers of which live around this rock. Used by the T!ʌ'q!dentān.



FACIAL PAINTINGS OF THE TLINGIT INDIANS

PLATE LI.

Explanation of Facial Paintings—Plate LI

a. A mountain in the Huna country called GēłA'k!ˢ. The design is supposed to show the outline of this mountain. It is used by the T!A'q!dentān, and was painted on the house of YAqxâ'n of that family by Dāxugē't, a Tcūkane'dī chief.

b. A cliff called Drum (*gao*). The red spot on the right cheek is a cavity in this cliff in which a shaman's body was laid, and the inclined blue and red lines represent the trail by which it was taken up. Used by the T!A'q!dentān.

c. Ǫānaxa', an island. The markings on the forehead and over the eyes are said to represent the island, while the round spots on the cheeks are called the "holes in Ǫānaxa'" (*Ǫānaxa' wuł*). Used by the T!A'q!dentān, who owned this island.

d. Sea-lion rock (*tan teyî'*). The rock is represented by the blue patch over the mouth, and the sea lions are indicated by small blue lines around the edges of it. On the forehead is a cloud. Used by the T!A'q!dentān.

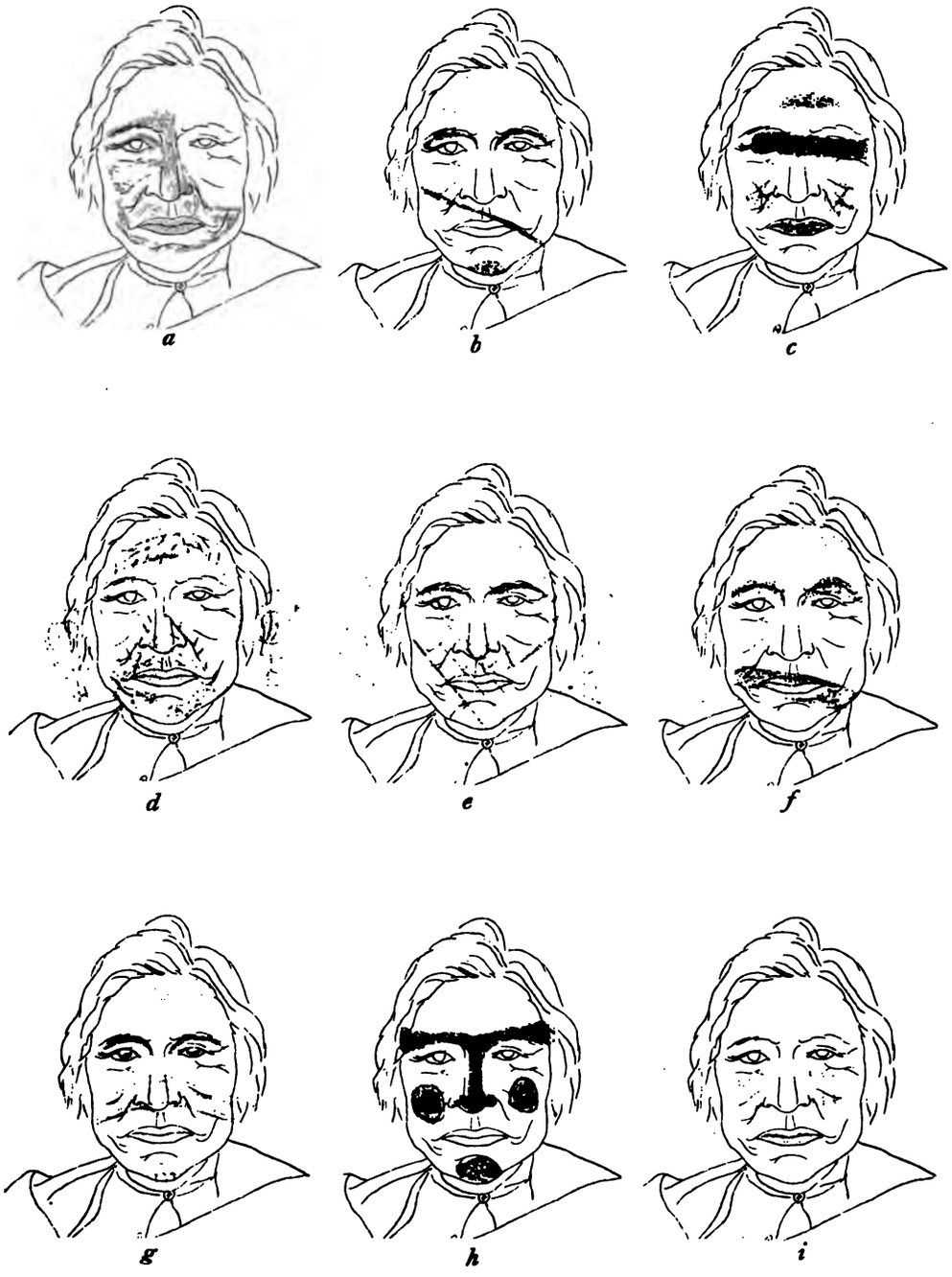
e. Waves that always come in at a certain place where the T!A'q!dentān used to go sealing. Two sets of these are represented crossing each other at right angles. Used by the T!A'q!dentān.

f. The blue band over the mouth represents a point of land (*q!ā*), the red at the parting of the hair a cloud over it, and the blue on the eyebrows slugs. Used by the TAq! hit tān.

g. Over the nose is a lake with rivers flowing out of it both ways. The red on the forehead is a cloud. Used by the Tcūkane'dī.

h. The T-shaped figure represents glacial ice and the other spots spirits (*gēks*) of the glacier. Used by the Tcūkane'dī.

i. Canoes with people in them going to Lituya bay or Dry bay. Used by the T!A'q!dentān.



FACIAL PAINTINGS OF THE TLINGIT INDIANS

PLATE LII.

Explanation of Facial Paintings—Plate LII

a. The constellation of the Great Dipper (*yʌxtê'*). Two stars alone are represented (on the forehead) with rays descending from them. The red patches are clouds. Used by the L!enē'dî.

b. This is called "Half-a-person's-body post" (*qā-cuwu'gās!*). It was put on only at great feasts, and might also be placed on the front of a house. Used by the T!A'q!dentān.

c. Raven (*yēł*). The tail is on the chin, the wings are on the cheeks, and the head and bill on the nose. The markings on the forehead are said to represent the bird's ribs. Used by all the Raven people.

d. Raven's wings (*yēł kî'djî*). A wing is represented on each side of the mouth, and on the forehead is a cloud. Used by the T!A'q!dentān.

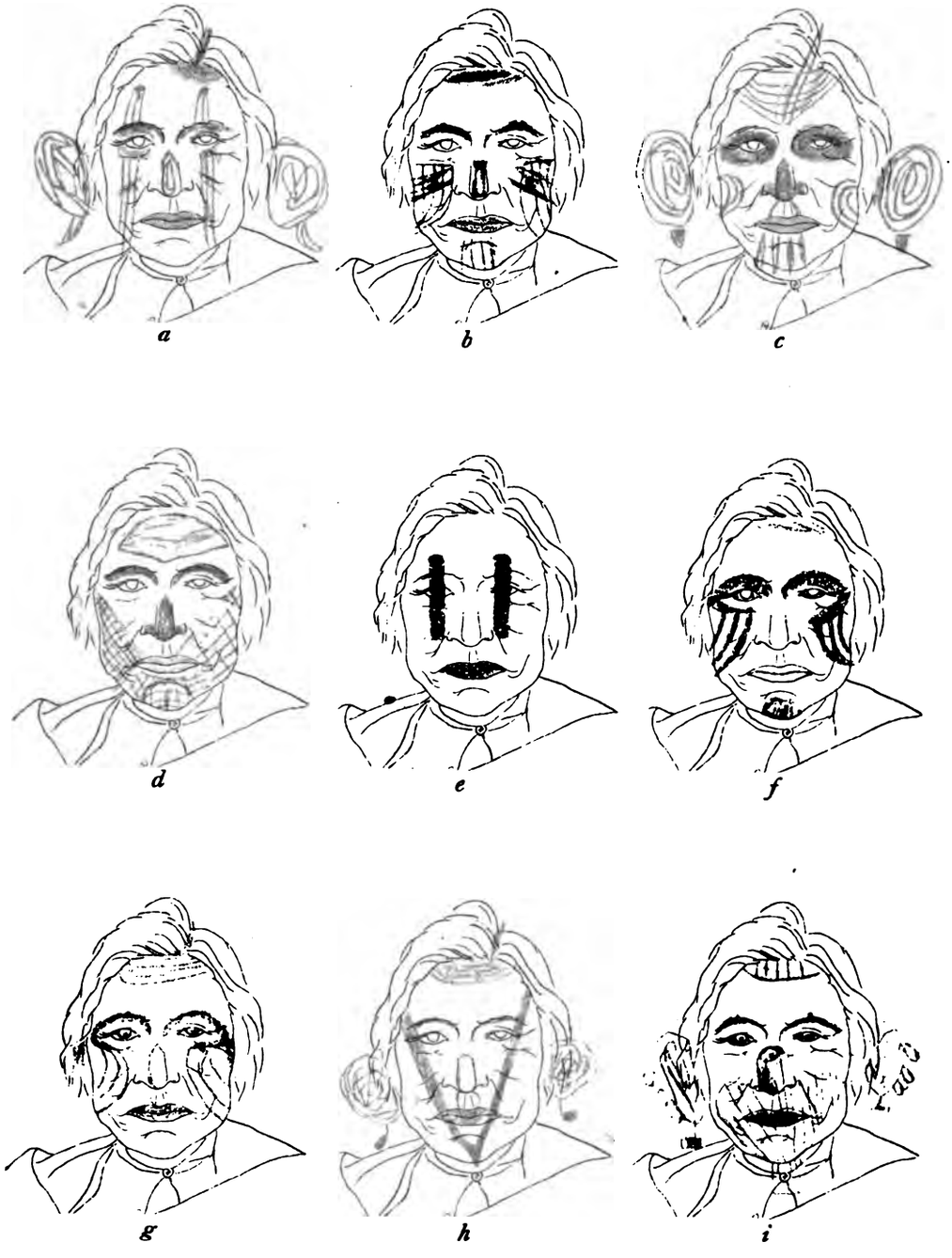
e. Raven's lower arms (*yēł djî'nî*); supposed to include sections from wrist to elbow. The red shows where they are cut off. Used by everybody.

f. Raven flying out of a whale, as told in the Raven story. Its claws are shown on each cheek. The spots "probably represent the things it went among." Used by Raven's-nest-house people (*Yēł-ku'dî-hît tān*), part of the T!A'q!dentān.

g. Same as plate LI, *d*, with a few alterations.

h. Raven's tracks (*yēł q!o'siyîte*). The V-shaped line indicates his irregular way of traveling about. Used by all the Raven people.

i. Raven's cooking place (*yēł xwē'xê*). Raven is figured around the mouth and the spring salmon he is about to cook suspended from the ears. Used by the Taq!hît tān.



FACIAL PAINTINGS OF THE TLINGIT INDIANS

PLATE LIII.

Explanation of Facial Paintings—Plate LIII

a. Raven traveling by canoe (*yēł daga qōxo'*). This refers to the time when Raven was traveling along in his canoe and made waves by jumping up and down. The waves are represented on the cheeks and are called "black Raven [waves]" (*yēł t!ūtc*). Used by the T!A'q!dentān.

b. Raven's passage on the water (*yēł yA'k^u deyi*). This represents an inlet divided into two parts. The blue is water, the green land, the red a rock permitting an entrance on each side, and the yellow "things around the rock." Used by women of the T!A'q!dentān.

c. Represents two dancing batons with which Raven used to beat time. Used by all the Raven people.

d. Goose (*t!āwA'q*). Used by the Kiksa'dī.

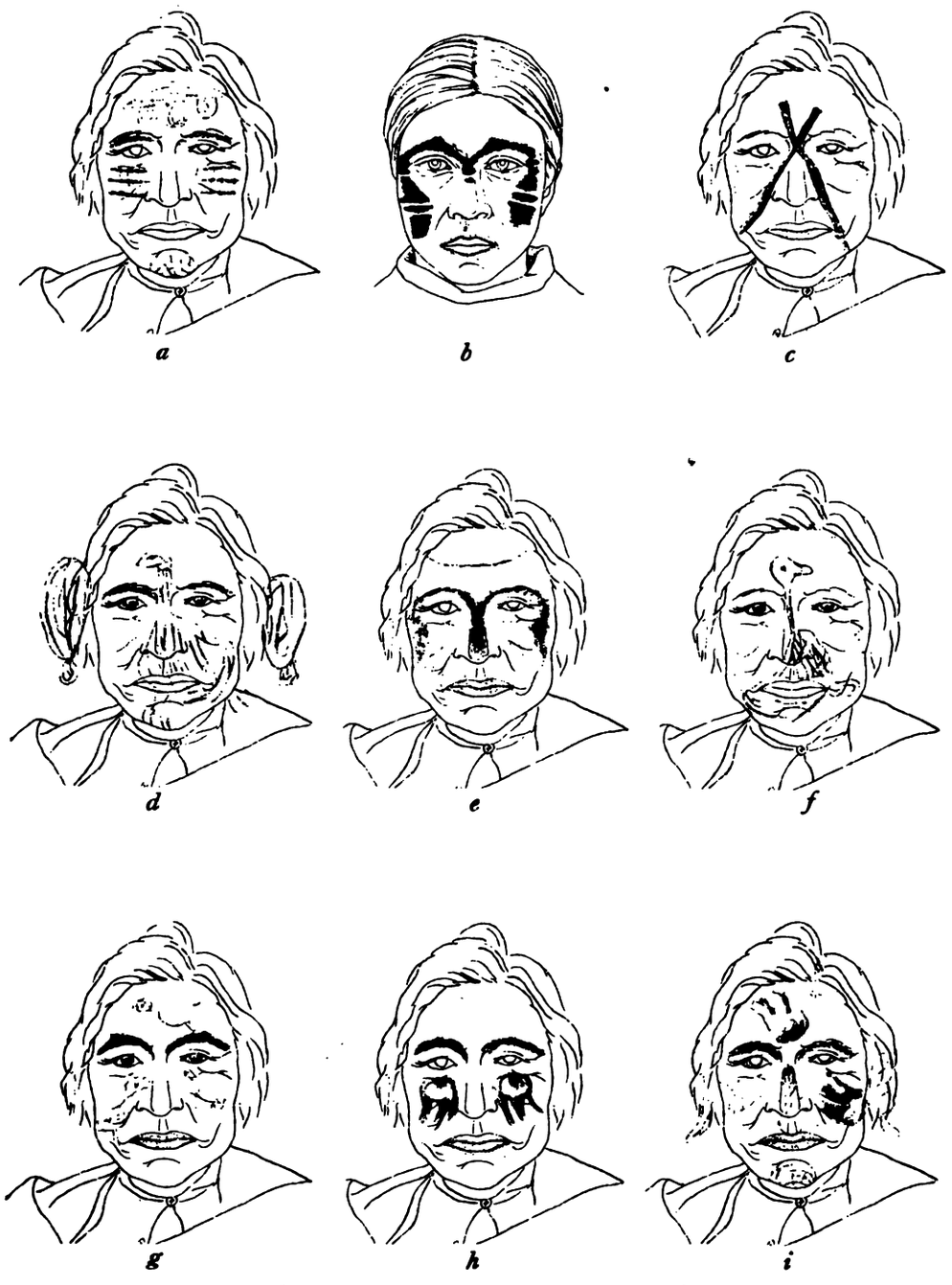
e. Goose head (*t!āwA'q cāyt'*). The head and bill are on the nose of the individual, the wings at the sides of his face, and what the goose is digging is represented by the marks below these. The painting on the forehead is said to have no significance. Used by the Kiksa'dī.

f. Swan painting (*gogL wucina'*). Used by the Q!Atkaā'yi.

g. Puffins (*rik*). Used by the T!A'q!dentān.

h. Bear feet. Used by the Kā'gwantān.

i. Bear feet (on forehead and left cheek) around a fire (represented by blue on nose). Used by the Kā'gwantān.



FACIAL PAINTINGS OF THE TLINGIT INDIANS

PLATE LIV.

Explanation of Facial Paintings—Plate LIV

a. A painting used by both sexes of the Tcūkane'dî. The bear paws and other marks are said to be simply decorative.

b. Bear tracks.

c. Whale painting (*yā-i q!ēn*). The whale's head is shown around the mouth; the ribs appear on the forehead. Such a painting is on a house front at Huna. Used by the T!a'q!dentān.

d. Whale's tail. The red on the upper lip is the tail, the other figures having no special significance. Used by the Taq! hît tān, who have also the whale hat.

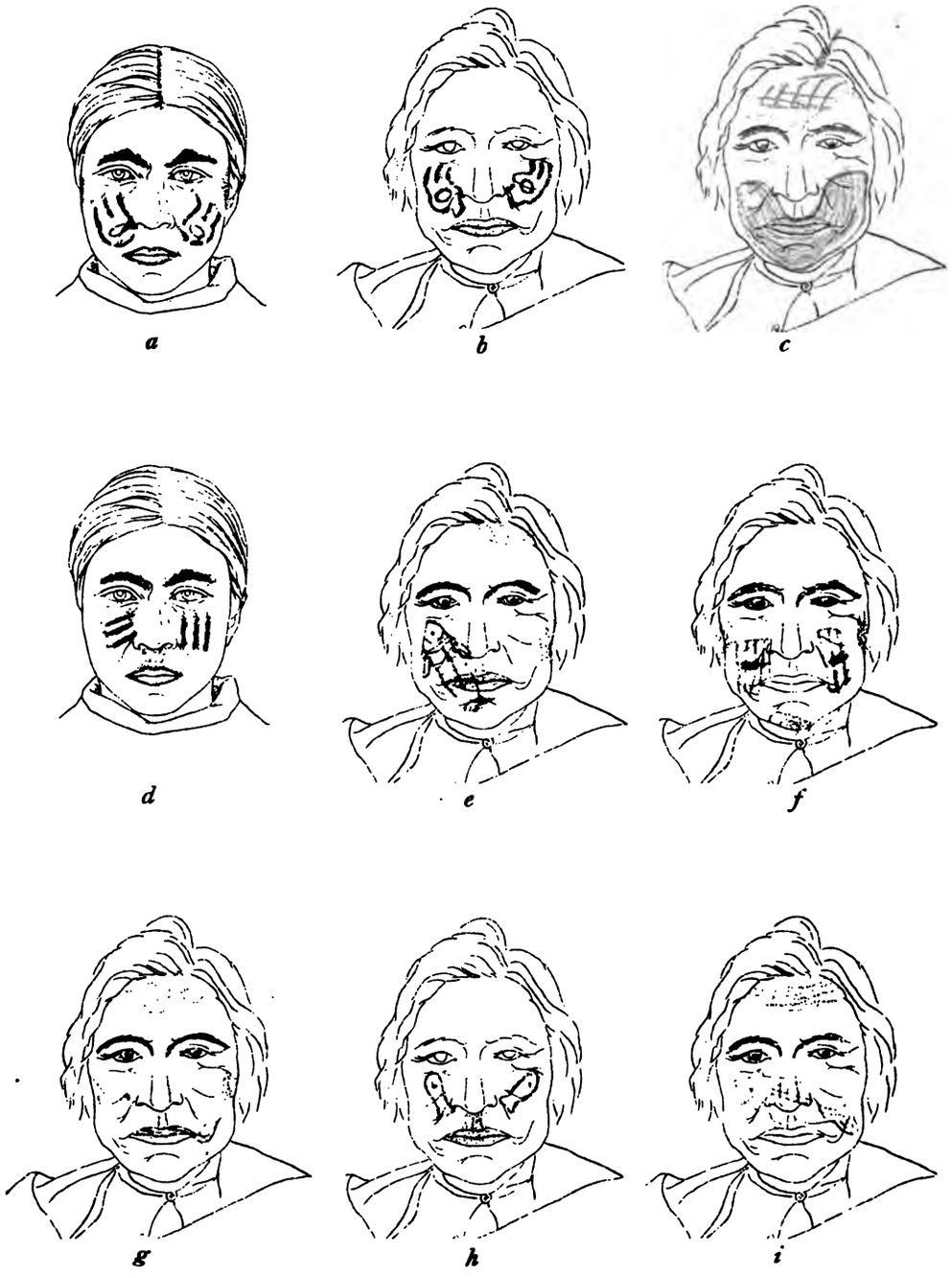
e. A killer whale (in blue) jumping over a rock (red spot on left cheek). Used by the Daql!awe'dî.

f. Killer whales (on eyebrows) chasing seals to rocks (on forehead). Used by Daql!awe'dî.

g. Porpoise (*tcātc*). Used by the Tcūkane'dî.

h. The king salmon (*L!ūk!*). A fish is represented on each cheek, and a house front by the red on the upper lip. Used by the Q!atkaā'yi.

i. Spring salmon. Used by the T!a'q!dentān.



FACIAL PAINTINGS OF THE TLINGIT INDIANS

PLATE LV.

Explanation of Facial Paintings—Plate LV

a. Black sea-bass (*łītīsdu'k*). Used by all families.

b. Starfish (*s!ʌx*), its body represented on the forehead and its arms on the cheeks. There is also painting on the lower lip around the labret and on the eyebrows. Used by women of the T!A'q!dentān, though here represented on a man's face.

c. Starfish that Raven tore up. This is represented once on each cheek, the fifth arm that was torn off being underneath. Used by all people.

d. Slugs, represented by the blue markings on the eyebrows, are supposed to be moving about on flowers, indicated by the crosshatchings and the chin markings. Used by the Taq! hit tān.

e. A potlatch painting. The large blue spots are dishes (*s!iq!*) and the narrow blue lines above them spoons. The red on the forehead is thought to be a raven's beak. On the chin is a woodworm. Used by the Taq! hit tān.

f. Head house (*qacā'yṭ hît*). The green in some way represents the rafters of a house while the ear ornaments stand for heads on the house posts. Used by the Taq! hit tān, who owned a house bearing this name.

g. Little ladder (*dzētk!*). This was first used by a man named QałA'tk!. He was evidently a shaman, because afterwards shamans' spirits used to go up a ladder to reach him, and the inclined red and blue lines represent this ladder. On the ears are abalone shells. Used by the Kā'gwantān.

h. Painting of sticks tied crosswise like a St Andrews cross (*k!ēct wucāna'*). This was originally used by a Wrangell man called Tsunā'k!ᵘ just before the last encounter between the peoples of Wrangell and Sitka, and was adopted by one of the Chilkat Kā'gwantān who killed him. Afterwards his people, both male and female, put it on their faces at dances and when about to go to war. The red represents blood, some of which is coming from the nose.

i. Another form of above.

j. The band of blue over the eyes is a box. The blue of the chin and the red stripe across the box are said to represent a copper plate leaning against the box. From the ears hang teeth of a large shark called *cʌ.rdʌ'q* found farther south. They are obtained in trade. Used by the Kūk-hît-tān.

k. Painted on the face of a "deer" when peace is being made. The spots on the cheeks represent the bow and stern of a canoe coming to make peace, and the inclined green line represents the pole (*ts!a'ga*) with which it is pushed along. Used by anyone.

FACIAL PAINTINGS OF THE TLINGIT INDIANS

PLATE LVI.

Explanation of Facial Paintings—Plate LVI

(Obtained at Wrangell)

a. Sun. On the chin is the reflection of the sun on water. Used by the Kîksa'dî of Wrangell.

b. Raven. Used by all Raven clans.

c. Raven, as painted for mourners.

d. The flicker (*kūn*). The lines on the forehead represent the head, those on the cheeks the wings, and those over the mouth the tail. Used by women of all Raven clans, though here represented on a man's face.

e. The flicker. Used by Raven people of both sexes.

f. The flicker.

g. Killer whale (*kît*). The upright bar is probably the dorsal fin.

h. The blowing of the killer whale. Two successive jets of vapor are represented. Used by the Nanyaā'yî.

i. Pieces of abalone stuck on with pitch. Used by the Nanyaā'yî and the Te'qoedî.

j. K!ĉct. See plates XLVIII, *b*, and LV, *h*, *i*.

k. Facial painting used by a Nanyaā'yî shaman when receiving inspiration from Unseeable (*Łdjī'dîtīn*). See pages 465–466.

l. Facial painting used by the song leader. When mourning black was substituted for red. All clans employ it.

FACIAL PAINTINGS OF THE TLINGIT INDIANS

a

SMALL BASKET REPRESENTING A MOUNTAIN CALLED TSAŁ XÃ'N

b

WOODEN DRUM WITH DESIGN OF KILLER WHALE

A B GRAHAM CO. LITH. WASH. D.C.

a. CREST HAT REPRESENTING KILLER WHALE

b. c. d. e. COPIES OF SHAMANS' MASKS

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